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# Original Communications.

## SURGICAL TUBERCULOSIS--A CLINICAL LECTURE.*

BY PROF. N. SENN, M.D., OF CHICAGO, ILL.

*Gentlemen*—I am under obligations to your distinguished professor of surgery for the opportunity of addressing you for a very brief period of time while sojourning in your city. I gladly accept his request to address you, and, in the absence of operative material, I have concluded to occupy your time by making a few remarks on the subject of "Surgical Tuberculosis." This may, perhaps, be a disappointment to you, because I know well that visiting surgeons are usually accustomed to display their operative skill. I know likewise, from a long personal experience, that students, as a rule, enjoy the operative work vastly more than the didactic teaching for the purpose of instructing them in

*Delivered at the Nashville City Hospital.

the pathology and diagnosis of injuries and surgical affections. I hope, however, that you will excuse me for having selected perhaps a non-interesting subject, because I hardly know what other subject I could present that would prove more profitable than a few remarks on the subject of surgical tuberculosis.

Only a few years ago, within the memory of nearly every practicing surgeon of to-day, surgical tuberculosis in all its various forms was described and treated as a mysterious affection known as "scrofula," of the nature of which the older pathologists and surgeons had no conception, and they had absolutely no idea of its etiology, nor of the pathological conditions presented by the multiform manifestations of so-called scrofulous affections. It is only during the last twenty-five years that this subject has been cleared up from an etiological and pathological standpoint.

In 1882 Koch discovered the real cause of tuberculosis and demonstrated the bacillus of tuberculosis. Tuberculosis of bones, joints and lymphatic glands are affections identical in their origin and clinical tendencies with the recognized pathological lesions in other parts of the body which have been recognized long ago as tubercular, like pulmonary tuberculosis and tubercular meningitis.

A few remarks on the immediate effect of the bacillus on the tissues cannot be out of the way. I have no doubt your professor of pathology has already made efforts to impress upon your minds the necessity of studying with care the immediate and remote effects of pathologic microbes upon the living tissues of the body. Some of them, like pus microbes, destroy at once the vitality of the tissues with which they come in contact, causing either necrosis or suppuration, the result of an acute inflammation which within a few days, and certainly within a few weeks, reaches its maximum pathological results.

Tuberculosis is an infective disease, representing chronic inflammatory processes of which it furnishes an excellent pathological type. The immediate effect of the bacillus of tuberculosis upon preëxisting tissue is not to destroy it at once, but to produce new tissue. Under the effect of the bacillus of tuberculosis the fixed tissue cells are converted into embryonic cells or granulation cells, hence the tubercular product is called a granuloma, being composed almost exclusively of granulation cells.

This is the first and most constant effect of the bacillus of tuberculosis upon every tissue, converting it into embryonic tissue. The tubercular granuloma differs from the inflammatory product of other chronic infective processes in the fact that in the tubercles no new vessels are produced. A tubercular nodule is not a vascular structure. It seems that the bacillus of tuberculosis is incompatible with the development of angioblasts, hence no new vessels are produced and the old ones are obliterated, leaving the inflammatory product in an ischæmic condition. Early degenerative changes occur partly in consequence of the malnutrition of the inflammatory product, but more particularly from the specific action of the toxins on the protoplasm of the cells. The degenerative changes that are first noticed in the embryonic cells and leucocytes occur in places most remote from the vascular supply in the oldest portions of the nodule, and consist in coagulative necrosis, followed by granular disintegration. If the disease proves progressive these changes are followed by another condition which we only find in the tubercular product, namely, caseation. Liquefaction of the caseous material gives *nil* to a tubercular abscess. Such abscesses do not contain genuine pus. This assertion may be perhaps somewhat contrary to your teaching, but what has been regarded as pus and described as tubercular pus, whether in the lymphatic glands, in the joints or in bones, is not a true abscess, but is a caseous material that has become liquefied. Liquefaction, then, of the caseous material is the third change which takes place in the tubercular process, regardless of the location of the disease.

We witness, then, in cases of progressive tuberculosis, in the first place, an inflammatory swelling, which is comparatively painless owing to the absence of acute processes. In the second place, enlargement, swelling produced by the presence of granulations, followed, when the disease is progressive, by coagulative necrosis, caseation and liquefaction of the caseous material, and finally the formation of a tubercular abscess. From the absence of acute symptoms these abscesses are called chronic or cold abscesses. The contents of a tubercular abscess do not correspond with the contents of an acute abscess etiologically or anatomically. We can readily demonstrate this by the aid of the microscope. The pus corpuscle retains the form of the leucocyte or

embryonic tissue cell and is nucleated. In the fluid of a so-called tubercular abscess the microscope only reveals a granular detritus. But I have a still stronger argument to advance to show that tubercular pus and the pus from an acute abscess are not identical, and this is the result of inoculative experiments, upon which the surgeons often rely in making a positive diagnosis in obscure cases.

Inject into the tissues of an animal susceptible to tuberculosis a fragment of the tubercular tissue or a few drops of the contents of a tubercular abscess and you furnish the crucial test—reproduction of the disease in the animal that is inoculated—tuberculosis resembling the disease in man to perfection. If I should to-day remove from this patient, the subject of tuberculosis of the knee joint, a few drops of the contents of the joint and inject it into the tissues of a guinea-pig, the following chain of pathological changes would be witnessed within a few weeks: A day or two after the inoculation a slight induration at the seat of puncture develops in response to local action of the virus. Within a week or two unmistakable evidences of regional infection appear, manifested by swelling of adjacent lymphatic glands. The bacillus is reproduced in the tissues, leading to progressive extension of the infection. The lymph channels are the favorite pathways for the diffusion of the tubercular infection. The lymph glands act as filters, thus retarding the regional dissemination. From the gland first involved the chronic inflammatory process travels in the direction of the lymph stream, extending from gland to gland until within the course of two or three weeks from the time of the inoculation the whole chain of glands is involved, showing the progressive character of the tubercular infection, and within five weeks the animal dies of miliary tuberculosis.

A post-mortem reveals, first, the primary nodule at the seat of the inoculation; second, extensive glandular tuberculosis, and, finally, inelastic tuberculosis of different internal organs, the result of general infection which occurs after the infection extends beyond the last lymphatic filter.

Death of the animal usually occurs from acute miliary tuberculosis, and that is what we witness so often in the human subject in cases where there is not much resisting power; in other words, where the susceptibility to the disease is well marked, or the primary infection is of an unusually virulent character.

The foregoing are a few pathological points I was anxious to bring to your attention as preliminary to some remarks on tuberculosis of bones and joints. If I have made these salient etiological and pathological facts clear, I can to better advantage present these two little colored patients that will serve as clinical subjects, and are typical cases of tuberculosis of bones and joints.

Bone tuberculosis is a very frequent affection during childhood and before the age of puberty. I mean to say by this that during the bone-growing period the individual is more susceptible to bone tuberculosis than after the age of puberty. This can readily be understood. Your knowledge of the minute anatomy of joints and of the articular extremities of the long bones will aid you materially in advance to be able to understand the effects of the tubercular process in childhood. You will recollect that during the bone-growing period new and imperfect blood vessels are formed with irregular spaces, and it is within these spaces we find conditions that particularly tend to the localization of the bacillus of tuberculosis, the mechanical conditions upon which depend the arrest of the micro-organisms floating in the systemic circulation. It is for this reason that in children and in the young, but not in adults, we so often hear of this; but as to the probable and immediate cause of the disease you can readily understand, as modern students, that no amount of injury can ever be held accountable for producing a tubercular joint or bone tuberculosis in the absence of the essential cause, and that is the bacillus of tuberculosis localized and stored up in some antecedent tubercular product. For instance, in the case of this child it would be impossible to conceive that the disease ever could have originated either from injury or from antecedent pathological conditions within the knee joint without the presence of the essential cause in the organism. The new bone and new blood vessels furnish anatomical conditions that predispose to the localization of the preëxisting essential microbic cause, so that in this child I can show you, after a careful examination of the body, that it would in all probability yield in its clinical history, conditions which would point to the existence of an antecedent tubercular affection in the form of enlarged glands about the neck or mesentery. What I wish to insist upon is the fact that we must regard the tubercular joint not as the commencing or primary

but as a secondary manifestation of the tubercular infection. It is this fact that is so often lost sight of by the practicing surgeon and the practitioner, who rely mainly upon local treatment in the management of such affections. It is essential to place great stress upon the early and prompt treatment by local measures of tubercular affections, but we must never forget the familiar clinical fact demonstrated repeatedly by the most painstaking post-mortem examinations that prior to the development of joint or bone tuberculosis there has existed at some time, perhaps remotely, an antecedent tubercular product which has remained in a latent condition, but which at any time can furnish the essential microbic cause which selects certain parts of the body predisposed to tubercular affections. In this case a mere inspection of the joint is all sufficient to make a positive diagnosis. I am always extremely anxious to warn young practitioners or students never to act upon the first impression, but to avoid making a diagnosis upon first sight. Look at the spindle-shaped enlargement of the knee joint with the largest diameter corresponding to the line of the joint, which constitutes the typical tumor albus of the old authors. There is an apparent enlargement of the articular extremities of the long bones entering into the formation of the joint. In cases of so-called tumor albus there is no enlargement of the articular ends of the bones. This apparent enlargement is the result of advanced disease of the synovial membrane and capsule of the joint, as was first pointed out by Samuel Cooper. If I should cut down upon the extremities of the tibia and femur I am sure I could demonstrate to you that both articular ends are only slightly, if at all, enlarged; but there is one thing in this case I am equally positive of, and that is this: that originally the disease had its seat not in the joint but in the epiphyseal line, either of the tibia or femur. It is not a case of primary synovial tuberculosis; it is a case of primary bone tuberculosis, followed by secondary invasion of the joint, as it so constantly occurs in bone tuberculosis when the disease is located in close proximity to such a large joint as the knee joint, particularly in persons less than twenty years of age, before the bone-growing period has terminated. In the majority of cases the tubercular process originates in the bone in the epiphyseal line in that part of the bone which is highly predisposed to tubercular infection in the case of children and young adults.

If the disease is not arrested in its earlier stages it is prone to extend directly or indirectly to the soft structures of the joint. In this case the disease has resulted in a tubercular abscess which perforated the skin, giving rise to secondary infection with pus microbes. If it were not for this serious complication I should be extremely hopeful that, notwithstanding the existing deformity caused by the joint affection, there could be still a reasonable hope to avoid performing an operation by resorting to one of the most recent and most valuable surgical resources in the treatment of joint tuberculosis. I allude to the use of parenchymatous and intra-articular injections of iodoform. Notwithstanding the fact that the medical profession has been slow in adopting and in practicing this method of treatment, it is what I regard as one of the most valuable advancements in surgery during the last twenty years. I am only too willing to testify to the safety and value of this procedure as one of the most powerful weapons with which to combat certain forms of peripheral tuberculosis. I have seen a tubercular abscess originating from the bodies of the vertebræ the size of a child's head heal permanently after a single puncture and iodoform injection. I have witnessed over one hundred such cases not quite so far advanced, but cases in which there was some serious doubt as to the utility of this measure, yield to two or three consecutive punctures and injections within a period of six weeks. I may say that no surgical resource in the treatment of tuberculosis has yielded grander or more satisfactory results, and, as I have just stated, I am very glad, indeed, that this case presents itself on this occasion in order to warn you in the selection of cases for this particular form of treatment. I have seen joints resected by men who stand high in the profession, where there was every prospect that this simple method of treatment I have alluded to would have yielded satisfactory results.

But, gentlemen, the surgery of to-day differs from that of only twenty-five years ago. The present tendency is to adopt more and more conservative measures in place of mutilating operations. It is no longer the man who can amputate a limb successfully and obtain satisfactory results that is entitled to distinction, but it is the humble worker in the science of surgery that interprets these pathological conditions correctly and subjects his patients to non-mutilating, conservative measures. It is the truth

of this statement I wish to impress upon your minds strongly in connection with the treatment of tuberculosis of joints, and in this case I have shown you that this ominous fistula in all probability has decided the fate of the limb, if not that of the patient. The injection of ten per cent. iodoform-glycerine emulsion every week or two in the treatment of uncomplicated joint tuberculosis yields the most happy results, because in such cases the iodoform exercises a specific anti-bacillary effect and at the same time constitutes what is invaluable in the treatment of such affections, a powerful tissue stimulant. Valuable as it is in cases of uncomplicated tubercular abscesses, such as I described to you in my preliminary remarks, it is useless in mixed infection with pus microbes. The uselessness of iodoform in the treatment and prevention of suppuration was demonstrated by the experiments made in 1890 by Rosving. He showed that pus microbes will grow luxuriantly upon nutrient media strongly impregnated with iodoform, and thus practically demonstrated that iodoform is not destructive to pus microbes, and we find his experiments and researches sadly corroborated by clinical experience in the treatment of tubercular joints, the seat of a secondary pyogenic infection.

The case before us is no longer a case of uncomplicated tubercular abscess of the joint. It is a case in which a fistulous opening has formed through which pus microbes have entered the diseased joint; pus microbes have reached the tubercular focus; they are now breaking down the tubercular granulations produced by the tissues for the distinct purpose of preventing the further extension of the tubercular process. It is this that is witnessed so suddenly in cases of tubercular abscess, treated by incision or drainage, if the abscess cannot be kept aseptic; and when the clinical picture changes so suddenly by a sudden temperature rise, the face becomes flushed, the pulse rapid and weak, profuse perspiration sets in, showing the existence of sepsis. This occurs not from the tubercular affection but in consequence of the mixed affection with pus microbes. This was the frequent, almost constant, experience of surgeons of twenty-five or fifty years ago in the treatment of lumbar abscesses or tubercular joints when they resorted to incision. Sad experiences of this kind soon satisfied them that simple incision and drainage was a

dangerous procedure and was frequently followed by progressive sepsis and death, death occurring not from the tubercular affection but from the complications caused by the secondary infection with pus microbes.

There is another circumstance in connection with such mixed infection with pus microbes that is important and of great pathological interest, and that is the rapid destruction of the granulations, which opens up new avenues for the extension of the tubercular infection. The breaking down of the granulation tissue creates a local condition favorable to the extension of the infection. This breaking down of the protective wall of granulation by the pus microbes opens up new pathways through which the tubercular bacillus finds its way to the adjacent tissues, into the lymph channels and the systemic circulation, which accounts for the frequency with which distant organs become involved after this complication has set in.

While I have lauded iodoform in the treatment of surgical tuberculosis, there is a limit to its use, and you might know as well now as at any other time the value of proper discrimination in the selection of therapeutic agents at the bedside. There are so many able men in our profession who lack good judgment in selecting the proper treatment adapted to existing pathological conditions. I have seen men inflict unnecessary pain repeatedly in vain attempts to secure beneficial effects by iodoform injections in suppurating tubercular joints. It is absolutely useless in that condition, and its legitimate use must be restricted to simple tubercular affections. It is this class of tubercular affections of joints that can be treated successfully by intra-articular injections. Iodoform has suffered in its reputation because men have not discriminated properly at the bedside in selecting suitable cases for this kind of treatment.

What is to be done in such an extensive case of tuberculosis of the knee joint, complicated by suppurative infection, as in the one before us? As far as life is concerned, I have no doubt that the practice of the old surgeons, who so frequently resorted to amputation, would be eminently proper in this case. Such treatment would lead in the most direct and shortest time to removal of the source of a double infection. Amputation is quite a serious operation and one that should never be resorted to unless we

can establish distinct and unquestionable indications. You would be astonished in visiting the different large hospitals, where conservative surgery is practiced, to witness so few amputations. The performance of such an operation is a humiliating confession on the part of the surgeon that the conservative measures which he may have employed have proved a failure.

There are two conditions I would like to point out to you that would guide me in determining upon the propriety of an amputation in such a case as we are studying now. In the first place you should make careful inquiry into the general condition of the patient. This boy is anæmic, but not extremely so. I have learned to regard pronounced anæmia as one of the most unfavorable conditions in patients requiring operations for tubercular affections. The absence of a profound anæmia in this case is in favor for recommending a conservative course of treatment. Another exceedingly unfavorable condition for successful operative interference in such cases is an extensive local œdema. If such a condition were present in this case I should have no hesitation in recommending amputation. Such an œdema in the absence of other pathological conditions would indicate a very advanced distribution of the tubercular process. In the absence of positive indications for amputation I would recommend free incision of the joint, removal of the tubercular product, irrigation of the wound and tamponing with iodoform gauze, in imitation of the practice initiated by the late distinguished Prof. Bilroth.

The limb should be immobilized in a useful position in a circular plastic splint during the entire after-treatment, as during the healing process there is a great tendency to increase of the contracture and subluxation of the head of the tibia backward.

The next case presented was one of tubercular spondylitis. Attention was called to the importance of an early diagnosis and immobilization of the spine by suspension and plaster-of-Paris jackets to secure rest for the diseased vertebræ, as well as the necessity of resorting to general treatment by the administration of guaiacol and other anti-bacillary agents. The lecturer placed special emphasis upon the therapeutic value of iodoform-glyce rine injections in the treatment of tubercular abscesses originating from the bodies of diseased vertebræ.

# INFANTILE SCURVY, WITH REPORT OF A CASE.*

BY J. R. BUIST, M.D., OF NASHVILLE, TENN.

On October 4th of this year, a mother brought her baby to me on account of persistent vomiting. This condition had set in over two weeks previously, and was suspected to originate from a slight error in diet. As it continued to be intractable, the infant rejecting nearly every thing given it, she concluded to consult me. There was at this time no other apparent ailment about the baby.

The child was the offspring of very healthy parents; had always enjoyed excellent health, and was well grown, plump and rosy. It had been entirely nourished at the breast; the supply of milk having been abundant and of good quality. The environments of the family were in all sanitary respects excellent; residing on a farm some twelve miles from the city. The four upper and four lower incisors had been cut some time, and the molars were advancing.

This infant was brought to me again on the 17th of October. The vomiting had nearly ceased, but for several days the child had been losing her healthy appearance, and had become quite irritable and out of sorts. The mother had observed three days before several purplish spots on the outer aspect of the thigh and in front of the knee, on the right limb. Some were soft and not elevated, one or two hard and nodular. She said these discolorations were increasing in number and size. My examination showed me that these were ecchymoses rather beneath than in the skin, from the size of a half dime to a silver dollar, but very irregular in shape and contour. Both limbs showed the same condition, and a number of spots were seen behind, on and above the buttocks, while a few smaller ones were noticed near the ankles.

No tenderness of the limbs nor swelling were present, and

*Read at the Nashville Academy of Medicine.

nothing suspicious about the gums, but the child was fretful and averse to examination. The following day I reported the case to the Academy of Medicine as one of purpura hemorrhagica, and asked for an opinion on the cause and treatment. Prof. W. M. L. Coplin, of Vanderbilt University, said he recognized a case of infantile scurvy in my account, and gave a history of similar instances he had seen in Philadelphia.

The next day Prof. C. visited the child with me, and after inspection and careful inquiry, we agreed that the facts warranted the diagnosis of infantile scorbutus in an early stage. We, therefore, instituted an anti-scorbutic regimen. The child was to take as much orange juice and lemonade as could be given it, and the mother was directed to drink lemonade herself, and change her diet to fresh vegetables and fruits; also pepto-mangan was given the baby.

The mother stated that for months she had abstained from vegetables and fruit and had adhered to a plain meat and bread diet.

In three days after this treatment was inaugurated the little patient was quite changed both in appearance and in temper. No new extravasations had occurred and the old ones were changing color. In ten days the child was practically well, and has remained so at this writing, December 10, 1895.

The dyscrasia that has received the name of "infantile scurvy" appears to have been introduced to the profession by a continental physician, in 1873, a Dr. Ingerslev, but the first full account of the disease was published in the *London Lancet*, November, 1878, from the pen of Dr. Cheadle, under the heading: "Three Cases of Scurvy Supervening Upon Rickets." Since the appearance of these communications the subject has received increasing attention from the profession in all parts of the world. Many contributions from the best writers on diseases of children have been published, while the most recent text-books have some space allotted to it. Dr. Thos. Barlow in particular has contributed largely to its elucidation, and in Germany the affection is often called after him. Probably much over a hundred cases have been reported, and it seems sufficiently well established that there is a hemorrhagic condition found in infants and young children identical with scurvy, only modified and influenced by

the anatomical peculiarities and surroundings of infantile life.

The characteristics whereby this disease is to be diagnosed, according to Barlow, Rotch, and Osler, may be summed up as follows:

The first disturbance to attract attention is tenderness and soreness of the lower limbs, simulating rheumatism. This steadily increases to a condition bordering on paralysis, marked anæmia, with sallow complexion, the gums become spongy if teeth have appeared, and bleed. In the language of Barlow, the symptoms stand in the following order:

"I. Predominance of lower limb affection. *a*. Immobility going on to pseudo-paralysis. *c*. General swelling of the lower limbs. *d*. Skin shiny and tense, but seldom pitting, and not characterized by undue local heat. *e*. On subsidence revealing a deep thickening of the shafts. *f*. Liability of fractures near the epiphyses. II. Swelling of the gums, varying from definite sponginess down to a vanishing point of minute transient ecchymoses."

In addition to these distinctive clinical features, the value of therapeutic results is quite equal in confirmation to those in doubtful syphilitic subjects.

Proptosis is another feature not rarely observed, due to extravsaation into the orbit. All the authors, while not emphasizing the cutaneous or rather subcutaneous effusions, allude to them. Rotch mentions a case in which "the hemorrhages in the skin were extensive, and where the proptosis was marked; the infant recovered when a properly modified diet was established."

Some careful autopsies have been made and the morbid anatomy noted. Rotch says that "the hemorrhage in infantile scorbutus is essentially sub-periosteal, and chiefly in the long bones." He has seen sixty or seventy cases, most of them being between eight and twelve months old. At a meeting of the New York Academy the subject was brought up in a paper by Dr. W. P. Northrop, and the discussion was participated in by many noted authorities on diseases of children. From the brief synopsis in the *American Journal of Medical Sciences*, May, 1894, we find nothing new developed respecting pathology; the paper described the condition as one of malnutrition which affects the capillaries, the hemorrhages occuring under the periosteum and in the skin.

The most noticeable thing about this discussion, to my mind, is the remarkable facility with which men of high attainments accept conclusions as to the causative relation of sequences. In an analysis of eleven cases Dr. N. reports the "same history," "feeding on proprietary food, feeding by a paid nurse or on food consisting of condensed milk." Also, it is more apt to occur among the well-to-do, for the reason that they are better able to pay for proprietary foods, and their children are less likely than those of the poor to have the freedom of the table."

Drs. H. L. Taylor, L. Starr, Jacobi and Emmett Holt attribute the condition to proprietary foods, condensed milk and sterilized milk. Dr. Northrop saw a case produced by the long-continuance of raw meat scraped. Dr. Rotch positively denies that sterilized milk can be responsible, while Dr. J. E. Winters has recently seen a number of cases cured by the substitution of sterilized milk for other foods. Certainly most of us would expect the medical mind of the present day to be more alert against the fallacy of *post hoc* being necessarily *proptor hoc*. To set down sterilized or condensed milk as a prime ætiotogical factor in infantile scrobutus appears to me to be a very loose method of scientific reasoning. Why assume that the ingredients of milk have altered by sterilization or evaporation. If there is any analogy in adult and infantile scurvy we should expect something similar in their ætiology. No observer has ever accused milk in any of its forms as tending to induce scurvy. The one thing alone that all the writers, ancient and recent, maintain as the active cause is a deprivation for a long period of fresh vegetables and fruits. Now, it is difficult to see how this negation applies to infants and young children; yet, if it is applicable at all, it must be in the quality of the milk; *e. g.*, the milk of the mother or of the cow must possess some virtue by reason of the food consumed by the producer. Have we any right to assume that the proprietary foods—condensed milk, etc.—are deficient in these supposed virtues—that of preventing scurvy? I think not. How many thousands of infants are to-day being fed upon these preparations, and yet how infinitesimal the proportion of those attacked to the whole number.

Dr. Rotch dissents from the opinion that sterilized milk contributes to this, and Dr. Winters asserts that he has seen actual cures result from feeding milk thus prepared.

The majority of observers believe that unsanitary surroundings, depressing influences and poverty predispose to the effectiveness of the active factor both in adults and children.

The condition of rickets is thought by many to have some connection with the scrobutic cachexia; perhaps we should say the former is thought to predispose to the latter. Dr. Rotch in his examinations has found no alteration in the chemical constitution of the blood, and I think other examiners bear testimony to the same result, yet it is very common to read of "profound alterations in the character of the blood."

We think, with all deference to the distingnished body where the discussion took place, that the author of the paper, as well as the contributors to the debate, committed themselves too early to a settled ætiology. The methods lack true scientific precision, and reminds us strongly of a non-sequiter reasoning. In the last edition of Osler we find the statement "that in opposition to this chemical view it has been urged the disease really depends upon a specific (as yet unknown) micro-organism." Also, that in Russia, scurvy is endemic and at certain seasons reaches epidemic proportions, and the leading authorities upon the disorder now in that country are almost unanimous, according to Hoffman, in regarding it as infectious. Osler says in a foot-note that the work of F. A. Hoffman, 1893, is the best on this subject.

It seems to us that the etiological aspect of this affection is by no means settled, and that there is a reasonable probability that the final solution will be in putting it into the category of bacterial diseases.

The chemical theories of blood alterations are by no means uniform. Garrod holds that the defect lies in the absence of a normal amount of potassic salts, while Rolfe, who has given the subject close attention, thinks that is a reduced alkalinity of the blood, due to deficiency of the mallates, citrates and lactates in the food.

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A CORONER'S jury in England once brought in a verdict that "a three-months'-old child was found dead, but there was no satisfactory evidence that it had ever been alive."

# THE USE OF THE BICYCLE.

BY HAZLE PADGETT, M.D.,
Professor of Physiology in the Medical Department of the University of Tennessee.

Much has been said and written about the use of the bicycle. It is occupying the thoughts of a great many. In this paper I wish to point out some of the invaluable benefits of using the wheel judiciously. You notice that I use the word judiciously, for the reason I do not mean to convey the idea that the bicycle is incapable of producing harm. The use of the wheel injudiciously in the hands of an undeveloped boy or girl, one who is not up to the average for his or her age can do harm, just like any other exercise foolishly used. Bicycling is a very fascinating exercise, and for that reason it is fast gaining hold upon the minds of our boys and girls, besides being an agent of practical use in every day business and professional life. Some are unduly prejudiced against the use of the wheel because they do not rightly think of the machine. In its use we get the combination of the popular exercises, walking, horseback riding, hill and mountain climbing. While upon level ground the rider derives the benefit of walking. Our modern wheels are so evenly balanced that upon level ground it does not require any more muscular effort to propel the machine than to walk. One mistake that many beginners make is that they undertake to ride too rapidly long before they are physically able to stand that amount of exercise. While riding upon level ground the muscles of the lower limbs are brought into use just as in walking. In riding up a moderate incline additional muscles as in the arms and chest, and while climbing steep inclines all the muscles of the lower and upper extremities, chest, back and abdomen are brought into play. The systematic use of the bicycle can and is accomplishing wonders in developing the body and making a strong and useful person out of one who was far from being strong. Some object to women and girls riding the

wheel; I do not. A well-devloped woman does not lessen the happiness of home. The touch of her fingers upon the piano keys is just as delicate, and her love is none the less because she is able to ride the wheel, and is thereby made a more perfect woman physically. Instead of being hysterical she now has a strong nervous constitution. Instead of having a weak body to undergo the trials of life she now has a robust form. And from the fact that many of our young girls are physically undeveloped and need more exercise, I say cheerfully let them ride the wheel. There is no reason why our girls should not develop their physical body just as much as their brothers, and when they learn the most important lesson of cultivating physical development we shall see a stronger generation in the future, and shall have many less grave and very annoying diseases to treat. A woman can be just as perfect a lady when riding the wheel as when upon a beautiful horse. And again, bicycling has its charms and fascinations that no other exercise has, and this element alone will cause our girls and boys to take advantage of, when otherwise they would not take to walking or horseback riding, or gymnasium work, and would remain in their rooms, growing daily more nervous, irritable and anæmic, and wonder why life is so dark and gloomy. Nothing is so invigorating as a moderate ride on the wheel when you have been mentally engaged and feel tired. This is a great stimulant, and one will have to try it in order to prove it. I owe not less than fifty per cent. of my physical development to the systematic use of the wheel, and indeed I appreciate the instrument and what it has done for me. It makes you breathe deep whether you so desire or not, and for this reason its systematic use for those who have weak and undeveloped lungs is invaluable. Facts are facts, and these things can be demonstrated.

And again, some would abolish the bicycle because in their minds they see many things that do not exist. I know that serious accidents have happened. I would have you notice the word "accident." In my personal association with the wheel now for some time I have never seen a single ill result, but many happy consequences. I would not think of advising a patient suffering with an appendicial abscess to ride a wheel any more than I would take suddenly a student from the school room

and place him in the harvest field in the hot July sun, and thereby do him harm. There is just as much reason to say that we ought to abolish railroads when a man is hurt from his own negligence, as to say that a person ought not to ride the wheel because someone has used it injudiciously and produced physical harm. How many parents wish their children stronger! And how many boys and girls, men and women who long for a more robust constitution, and yet they will not use those means that will make them less nervous, less irritable, with less indigestion, less constipation, less fault-finding and make them stronger physically, bring the blush of youth again to that pale face, making soft and flabby muscles, strong and robust; making their lungs stronger, taking in more air, giving more oxygen to the blood and sending the red cells happy on their mission. It is almost useless to enumerate the many advantages to come from the use of the bicycle. The men whose oppose so vigorously the use of the wheel will in the next sentence advise a boy or girl to take exercise in the gymnasium, or to walk, or ride the horse. Many will follow partially that advice, but will soon give it up, when on the other hand they begin the use of the bicycle they find out for themselves that they derive much pleasure and physical development. Monuments have been erected to commenorate the deeds of men. Tablets have been written to praise the names of individuals, and we owe a great deal to the systematic and common sense use of the bicycle, and indeed it has come to stay, and should I be called upon to write a tablet of praise for the machine I would say, "safety, pleasure and profit."

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

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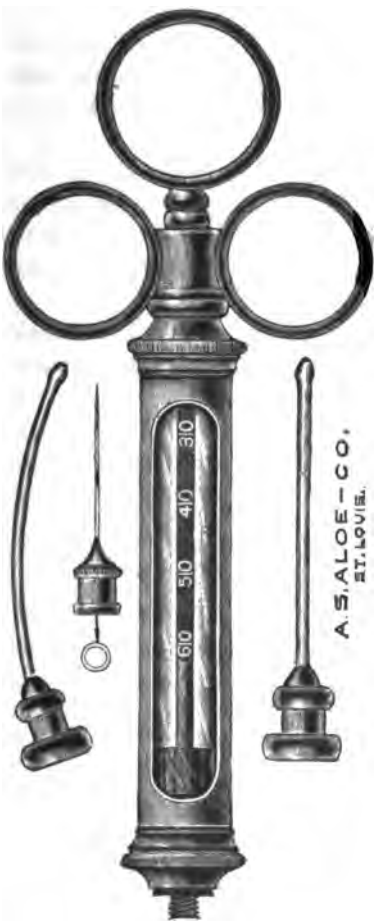
EVERY fatal case of typhoid, says Mr. Ernest Hart, is, in fact, a violent death, an example of water poisoning, and should be the subject of sanitary inquest.—*Med. Record.*

# AN IMPROVED SYRINGE FOR INFILTRATION ANÆSTHESIA.

BY BRANSFORD LEWIS, M.D., OF ST. LOUIS, MO.

During the past year I have been making large use of Schleich's method of producing local anæsthesia by infiltrating tissues with innocuous solution of salt, morphine, cocaine, etc., the anæsthetic effect resulting from the method of applying the fluid rather than from the drug or drugs employed in it. It has been a source of great satisfaction to both me and the patients on whom it was used. The minuteness of strength of drug employed removes every element of danger from that source, even though a large quantity of the solution be injected; and the completeness and promptness of the effects are advantages readily evident.




But I have met with one objection that has restricted the use of the method in a marked degree. It is the fact that, no matter how easily and satisfactorily it may be employed in the superficial structures, where there are no large vessels in danger of being punctured with the hypodermic needle, when one is injecting in the depths of a wound in the neighborhood of

large arteries or veins, as in enucleating bubo glands immediately above the femoral vessels, etc., the likelihood of running the needle into one of them and producing disastrous results is not a fancied one.

By means of the needles represented in the cut I have been enabled to do away with this difficulty. They are blunt-pointed and made of German silver, so that, though of sufficient stiffness to be thrust into the connective tissues of a wound after the skin has been severed, they would not injure a blood vessel if pushed against one.

The anæsthesia is begun, therefore, with the sharp steel needle and continued with either of the two silver ones. The choice between the latter depends on whether a curved or straight needle is more conveniently used.

The advantages offered by this improvement have shown themselves to be eminently practical and serviceable, and, in my estimation, will advance the scope and usefulness of the method to a great degree. This instrument was made for me by "A. S. Aloe Company," of St. Louis, Mo.

FORMULA.—In his various surgical procedures, Dr. Schleich finds the following three solutions of graded strengths to answer all purposes:

STRONG SOLUTION, No. 1.

℞ Cocain. muriat. ..... gr. iii.
Morph. muriat. ..... gr. i-3.
Natr. chlor ..... gr. iii.
Aq. dest. ..... ad oz. iii.
M. Sterilisat., adde sol. acid. carbolic., 5 per cent. gtt. iii.

MEDIUM-STRENGTH SOLUTION No. 2.

℞ Cocan. muriat. ..... gr. iss.
Morph. muriat ..... gr. i-3.
Nat. chlor. ..... gr. iii.
Aq. dest. ..... ad oz. iii.
M. Sterilisat., adde sol. acid carbolic, 5 per cent, gtt. iii.

WEAK SOLUTION, No. 3.

℞ Cocain. muriat ..... gr. i-6.
Morph. muriat ..... gr. i-12.
Natr. chlor ..... gr. iii.
Aq. dest ..... ad oz. iii.
M. Sterilisat, adde sol. acid carbolic, 5 per cent, gtt. iii.

Solution No 1, Dr. Schleich uses for operating on the inflamed

or hyperæsthetic areas; No. 2, for most operations; No. 3, for superficial operations on nearly normal tissues.

To carry out the aims of asepsis, he recommends that only sterile solutions be used; and to this end, he advises that the reservoirs be sealed with scorched-cotton stoppers, and that from these, smaller vessels should be filled at the time of operating.

I have made use of the infiltration method in operating on buboes (enucleation); in opening a prostatic abscess through the perineum; in circumcisions and some other minor procedures.

In working in superficial structures, its effect is all that one could wish, and beyond criticism. While in the deeper parts of wounds such as met with in evacuating prostatic abscess, enucleating buboes, etc., it is more difficult to secure a complete and and absolute anæsthesia, on account of the care necessary to prevent the injury of deep lying structures, still, with the increased skill obtained by practice, objections on this line are removed and local anæsthesia is effected with proportionately increasing success. It appears to me that testicular ablation, for instance, could be done without a particle of suffering on the part of the patient.

The after-pain I have not found to be greater than with other modes of anæsthesia; and the other disagreeable after-effects of general anæsthesia are, of course, avoided. Two of my patients were over sixty years old, yet they felt as well after as before the operations. No symptom of intoxication has become evident in any case that I have observed, and I have not been sparing in the use of the fluid.

I have made use of a larger syringe and longer needle than that recommended by the author, and I think this faciliates matters considerably, obviating numerous successive punctures in order to fill up the tissues sufficiently. The infiltration may be begun with a small syringe and fine needle, and continued without pain, with the larger.

1006 Olive Street.

[In this connection, the following from the *American Medical Review*, will be of interest to our readers.—ED. S. P.]

"A recent meeting of the Philadelphia County Medical Society was rendered particularly interesting on account of the presentation of a paper by Dr. T. Parvin, on the new method of

abolishing the pain of surgical operations without the necessity of employing ether or chloroform. This is the system suggested and practiced by the well-known German surgeon, Schleich, who, by its use, has been able to perform practically all of the minor and many of the major operations of surgery without the slightest pain to the patient and without depriving him in any other way of his consciousness.

By the method of Schleich there are prepared three solutions of common salt, in which are dissolved different quantities of muriate of cocaine and morphia. The part to be operated upon is thoroughly cleansed with an antiseptic solution and the surface brought to a low temperature by a spray of chloride of ethyl. Into this area of the skin, which, by the action of the spray, has been deprived of all sensation, the salt solution containing the cocaine and morphine is injected by means of a special hypodermic syringe, numerous punctures being made in all directions. This renders the deeper structures insensible to the surgeon's knife, and for a period of from twenty minutes to half an hour the patient is not conscious, so far as actual pain is concerned, of extensive cutting and sewing.

The new method differs in an important degree from the ordinary employment of hypodermic injections of cocaine. The strength of the drug which has been used in the past is about one part in each twenty-five parts of the solution, while in the Schleich method there is often employed a strength of only 1 in 10,000. In the former, however, only a few drops of the solution are employed, while in the latter the tissues surrounding the part to be operated upon are thoroughly infiltrated with the solution. With the small quantity of the cocaine employed by Dr. Schleich, it is apparent that something more than cocaine is responsible for the local anæsthesia so perfectly obtained. In the opinion of Drs. Keen, Ashhurst, and Morton, who discussed the merits of the new system, the infiltration of the tissues with the solution, and the distension and consequent pressure upon the small nerves were responsible in a large measure for the absence of pain when the incision by the knife is made.

To indicate the manner of employing the method of Schleich, and to show the entire absence of pain, one of the surgeons had the solution inserted beneath the skin of the arm and an incision an inch long made and sewed up before the society.

# Correspondence.

SMYRNA, TENN., Dec. 18, 1895.

*Southern Practitioner:*

DEERING J. ROBERTS, M.D., *Editor and Proprietor*—The report in your December number of the Tri-State Medical Society of Alabama, Georgia and Tennessee interested me greatly.

Dr. J. B. Cowan's statement, that those who use cistern water never have malarial fever is a very important fact, if true, but there are other causes of malarial infection. The malarial poison floats in the atmosphere, along our creeks, rivers and marshes, and is inhaled into our system with the air we breathe. You know the old story that the sturdy Roman, by camping one night near the Pontine marshes, would contract a malignant malarial fever that often proved fatal. Still cistern water is the purest water we have.

Our own Dr. J. B. Murfree, whose sturdy frame denotes the character of the man, never to let go when once he gets hold, read a paper on "The Placenta—When and How Delivered."

As soon as the child is born pressure should be made over the mother's abdomen until the womb contracts, then if no serious hemorrhage is present, take a soft cloth and rub the child all over quickly, eyes and head first, and you will remove all that white gummy stuff, that is so hard to get off when it gets dry. You can pull gently on the cord, at any time when the womb is contracted. No need to introduce the hand into the womb unless the placenta is attached and will not come down in reach of the os. In taking the placenta out, when in reach, do so slowly, twisting it on itself so as to make a sort of rope of the membranes, and everything will slip out easily. But if you have one of those bleeders to contend with, lookout for squalls; then introduce your hand at once and clear the deck. Next saturate a small white cloth with strong vinegar and introduce the hand with the cloth up to the fundus of the womb, and give pure un-

diluted vinegar, by the mouth, in half to one tablespooful doses every 20 or 30 minutes, until the hemorrhage ceases. In the meantime, a teaspoonful of laudanum and camphor each should be given at one time. After all this has been done, no need of curetting or packing the womb with iodoform gauze to prevent sepsis, etc.

A rich warm blood will be passing over all the raw surfaces, and nature will do the healing. Wash out the vagina once or twice a day with hot water from a fountain syringe, and give Hayden's Virbunum Comp. in teaspoonful doses 3 or 4 times a day to tone up the system and assist nature to bring on the natural subinvolution of the womb. I am satisfied from my long experience, now near a half century, in obstetric practice, that more women lose their lives from meddlesome midwifery and from the curette and gauze than from anything else. Of course, if there is an abrasion about the labia, from the use of the forceps, or a rupture of the fourchette, we must treat that. Now I know nothing better than campho-phenique, one part to three parts olive or castor oil, applied twice a day with a camel's hair pencil.

Internal treatment is the thing for sepsis, for if the poison is in the blood we must send something through the blood to kill or neutralize the poison. Of our old remedies quinine, in 2 to 3 grain doses, four hours apart, and mur. tinct. iron, 10 to 20 drops every six hours, with dilute sulph. acid, are valuable. And now we also can give the peroxide of hydrogen (med.) or the hydrozone (med.) internally, and use either as a vaginal wash.

Protoneuclein will soon come in as the great scavenger of the blood, purifying it by taking out all the bacteria, etc.

J. W. Davis, M.D.

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Sander & Sons' Eucalypti Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

# Selections.

How to Treat a Cough.—Unfortunately it has not been demonstrated that we have anything like a specific for the more severe diseases of the chest, as phthisis or pneumonia. There are some good reasons for believing, however, that we may soon be as successful in treating these diseases as we are now successful with diphtheria under its new treatment.

The knowledge of the cause of phthisis enables us to detect that disease in its very earliest stages, while the physical signs of pneumonia are sufficiently distinct to tell us of its presence. With two such formidable diseases to treat, the question of controlling the cough may be an altogether minor one, at least for a time. But we have to remember that for every one of these cases we have a score or more of the lighter affections of the chest. We may have a superior ability in directing a case of phthisis, yet we signally fail in the eyes of the laity if we cannot speedily master a hacking cough.

The object of this brief paper is not to try to teach my colleagues how to treat a cough, but simply to state how I do it, what good results I get, and to call their attention to those lighter affections of the throat and chest the principal symptom of which is an annoying cough, for which alone we are often consulted. The patient may fear an approaching pneumonia, or be anxious because of a bad family history, or the cough may cause loss of sleep and detention from business. What shall we do for these coughs? It has been my custom for some time to treat each of the following conditions after this general plan: If constipation is present, which is generally the case, I find that small doses of calomel and soda open the bowels freely, and if they do not, I follow them with a saline purgative; then I give the following:

℞ Antikamnia and codeine tablets, No. xxx.
Sig.: One tablet once every four hours.

The above tablet contains four grains and three-quarters of

antikamnia and a quarter of a grain of sulphate of codeine, and is given for the following reasons: The antikamnia has a marked influence over any febrile action, restores natural activity to the skin and effectually controls any nervous element which may be in the case. The action of the codeine is equally beneficial and in some respects enforces the action of its associate. The physiological action of codeine is known to be peculiar in that it does not arrest secretion in the respiratory or intestinal tract, while it has marked power to control inflammation and irritation. It is not to be compared with morphine, which increases the dryness of the throat, thus often aggravating the condition, while its constipating effect is especially undesirable.

*Irritable Cough.*—The patient complains that he has a constant tickling in the larynx, which makes an equally constant desire to cough. Nothing else appears to be the matter, and if this cough were only removed our patient would be satisfied. He also complains that the more he coughs so much the more irresistible does it become.

*Hacking Cough.*—This occurs both in children and in adults, and appears to be due to an irritated condition of the mucous membrane of the upper air-passages. The desire is not so strong as in the above-mentioned variety, neither is the cough itself so severe.

*Harassing, Irritative Cough.*—This is one of the most stubborn coughs to relieve. The patient complains only of a harsh, hard, dry cough which begins the moment he lies down to rest and continues through the greater part of the night. During the day there is but little trouble and his hopes are raised only to find them all disappear when he again seeks rest. In these cases the same tablets are given more frequently, while slight counter-irritation over the upper chest, perhaps a hot foot-bath before retiring, and some hot drink may be added.

*Winter Cough.*—Then, again, we have the chronic cough of winter, which comes with persistent regularity with the beginning of the cold season. This is especially the case with elderly people, who often have a chronic bronchitis. Here, again, we have the two drugs indicated, as mentioned above.

*Nervous Cough.*—This is a cough which does not appear to have any physical cause whatever. It is aggravated by those

conditions which irritate or excite the nervous system, as well as by those which weaken or debilitate it. The same tablets will control this irritability at once.

*Excessive Coughing.*—In cases of bronchitis or phthisis the cough is often far in excess of an amount sufficient to free the lungs from mucus. The object here should be to reduce the force and frequency of the cough to only the necessary amount. This is easily accomplished with the tablets, without causing any disturbance of the digestive organs.

*Acute Cough.*—Lastly, we have the acute coughs, more or less severe, which accompany the acute inflammations of the upper air-passages, as in acute colds. In these cases we almost invariably find an increase in the pulse, elevation of temperature, dry skin and a dry throat. The antikamnia has a marked influence over these conditions, insuring their prompt relief, while the codeine effectually controls the inflammation and irritation, exerting an action of its own and enforcing the action of its associate. I might also mention the cough which accompanies measles. This is brought under prompt control by the tablets, while the antikamnia exerts a marked influence for good over the disease itself.

In the treatment of a cough I am fully aware we are usually treating a symptom. But experience has demonstrated that in a great majority of these cases when remedies are administered which show their effect by controlling the cough they remove the other difficulties as well. I conclusion, I wish to say that whenever we desire to control a cough, without affecting the normal functions of the respiratory and digestive tract, I have found in both dispensary and private practice nothing better than the combination above referred to.—*Edwin Geer, M.D., in New York Med. Jour.*

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KEROSENE IN SURGERY.—I desire to put on record the following therapeutic novelty to enrich the arsenal of surgical remedies:

In cases of wounds and ulcers of the trunk and of the limbs in persons of the poorer classes the treatment employed was, according to the pathological septic conditions, by the usual antiseptic methods; but I found that recovery progressed very slowly,

on account of the fact that time and circumstances did not allow the patient to apply these preparations as often as necessary.

For this reason I determined to try some other substance as an antiseptic, and it occurred to me to try the effect of kerosene in these cases.

For this purpose, in cases of ulcers, especially atonic and indolent ulcers, I smeared them with commercial kerosene, either pure or diluted (from thirty-three to fifty per cent.) with alcohol, with a small camel's-hair brush or with a piece of gauze soaked in the solution. Shortly after the application a burning sensation was felt, but it soon passed away.

The appearance and character of the ulcers showed a change for the better; the discharge gradually diminished, and in the course of from two to four weeks after primam intentionem the rapidly-granulating surface formed a scar without any contraction o the surrounding parts. The advantages of the use of kerosene for such cases may be summarized as follows: It produces healing in a comparatively brief space of time; it is much more economical and is easily obtained; I have never found the wound to be complicated with any erysipelatous process; it does not produce constitutional poisoning through the wound by absorption as other antiseptics sometimes do; it has not the intolerable smell of some of the others which are now in use; and the formation of a cicatrix on the ulcers is rapidly developed. Kerosene, having a local irritating action on the wound, undoubtedly possesses also disinfecting properties for the remote surface as well as for the adjacent surface around the wound. This is of great value, for actual facts show that persons residing in the kerosene-oil districts are protected against ailments of an epidemic character, such as cholera, etc.—*A. Schirman, M.D., in New York Med. Jour.*

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Simple Manner of Overcoming the Catarrh Consequent on the Administration of Potassium Iodide.—Dr. Cohen (*The Lancet*) has often observed that patients taking iodide of potassium suffered in a marked degree from "iodism," the chief symptoms being coryza, with a sometimes profuse discharge, sneezing, pains over the frontal sinuses, swelling of any part of

the mucous membrane of the mouth and a sense of heat in the chest. The foregoing phenomena are identical with those attendant upon the inhalation of free iodine (Mitchell Bruce), and it has been observed that one is more likely to be attacked with catarrh if the iodide of potassium contains free iodine as an impurity. This seems to justify the belief that the catarrh of iodism is due either to iodine being secreted by the salivary glands or to the circumstance that iodide of potassium is broken up in the mouth after its secretion and free iodine liberated. The latter view is supported by Schmiedeberg, who has proved that iodide of potassium in the presence of carbonic acid is decomposed, the latter being abundant in the expired air in the region of the salivary glands. While taking charge of Dr. Herschell's outpatients at the National Hospital for Diseases of the Heart the writer has been able to stop the catarrh in three well-marked cases by adding, (the mixture being in each case ten grains of iodide of potassium and half an ounce of water), five minims per dose of tincture of belladonna, his object being to reduce the salivary secretion, and in each case the result was satisfactory. Any antisialagogue would doubtless have a similar effect, but belladonna is, in his opinion, the most useful, as it can easily be given in the form of a mixture with the iodide, and in the small dose that is used in such cases it counter-balances the so-called "depressant" action of the potassium.—*Med. Record.*

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Common Salt as a Remedy for Ringworm.—F. J. Reilly, M.R.C.S., states in the *Brit. Med. Jour.* for November 23d that he has used common salt as a remedy for ringworm for the past seven years. Children, he says, who are suffering from tinea tonsurans are sent to the seaside and almost invariably improve in the salt air. This improvement has hitherto been ascribed to the general favoring influence of the open-air life and improved hygienic conditions under which children live at the seaside. But, says the author, when we remember the fact that the air near the sea is impregnated with minute particles of sea water containing in solution as it does a large proportion of sodium chloride, may we not reasonably ascribe the disappearance of the skin disease to this circumstance? This fact, he says, arrested his at-

tention and led him to think that common salt might prove a valuable remedy in ringworm. Accordingly he prepared a solution and used it in the next three cases which he was called upon to treat, applying it to the diseased scalp every night for five nights and washing it off the following morning with ten per cent. boric acid soap. In less than four weeks a cure was effected in each case.—*New York Med. Jour.*

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GLYCERINE IN GRAVEL.—Dr. Heymann (*Rev. De Ciencias Med. De Barcelona*) has employed glycerine in renal lithiasis on account of its property of dissolving uric acid, and also passing unaltered through the kidneys. He records fourteen cases treated by this method. He summarizes his conclusions as follows:

The first effect of its ingestion is to increase the thirst. In those suffering from stone in the kidneys pains appeared in this region, being limited to the side affected. The quantity of urine was increased, and after a varying time of nine to twenty-four hours small calculi were expelled. In ten out of these fourteen cases he obtained favorable results. The pains were not as severe as those of renal colic, while the urine, after its ingestion, contained neither albumen, sugar nor hæmoglobin. Even after three to four hours the presence of glycerine could be discovered in the urine in appreciable quantities. A large quantity of mucus was also noticed. Based upon these results, he regards glycerine as the most efficient means of treating renal lithiasis.—*Med. Times.*

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STRYCHNINE IN PNEUMONIA.—In the report of the Surgeon-General of the Navy, Commodore J. R. Tryon, of a year ago, mention was made of the apparently favorable results of the hypodermic injection of strychnine in the treatment of lobar pneumonia. In his report just issued Dr. Tryon says that the favorable opinion entertained of the value of this drug in the treatment of pneumonia has been further strengthened by the experience of its use during the past year. Forty-five cases of acute lobar pneumonia were treated in the Naval Hospital in Brooklyn during the past two years with but three deaths, a mortality of only 6.0 per cent.—*Med. Record.*

CANCER OF THE STOMACH IN A MAN TWENTY-FIVE YEARS OLD.—Mathieu and Quènu (*Bul. Med.*, 1895, p. 458) report the case of a man twenty-five years of age with severe stomach symptoms of three years' duration, who was found to have a cancer of the stomach. An exploratory laparotomy revealed cancerous nodules scattered over the peritoneum, and a mass on the lesser curvature of the stomach near the pylorus. The pain, which had previously been severe, disappeared after the laparotomy and appetite returned, but three months later the patient succumbed to a profuse diarrhœa.—*Amer. Med.-Surg. Bul.*

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ALCOHOL HABIT.—Dr. Machette, in the *Medical World*, claims to have but two per cent. of failures in his treatment of the alcohol habit. He gives his patients a hot bath and a cathartic, then a hypodermic injection of hydrastine, beginning with one-fiftieth of a grain and gradually increasing until one-twentieth of a grain is given four times a day. Valerian and bromide are given for nervousness.

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OPERATIVE SURGERY IN THE FACE.—In a very instructive paper Dr. John B. Roberts, presents amongst others, the following suggestions: Incisions made in the skin of the face should be placed where there is usually a shadow, as under the brow or beneath the lower edge of the jaw, or in the bottom of the furrows produced by the habitual expression of the patient. When this cannot be done the cut should be made parallel to a facial line rather than across it. A slightly curved incision makes a less conspicuous scar than a straight or abruptly curved one. Accurate apposition of the edges of the wound, which causes least scarring, is best occomplished by making the incision through the skin somewhat obliquely to the plane of its surface. Septic inflammation after operations upon the face can usually be avoided by thoroughly sterilizing the parts with corrosive sublimate before applying the sutures, and subsequently either keeping the wound dry, or removing all secretion by frequent antiseptic irrigations. The maintenance of an aseptic condition and the application of heat to the damaged structures (frequent irri-

gation with water of the temperature of 105°) will often result in saving tissue apparently devitalized. Fine silk is the best suturing material for wounds of the face, as catgut may be absorbed at a too early period and allow separation of a portion of the wound. Strips of gauze saturated with collodion make a good dressing, except in the neighborhood of the eyelids, where at times the contraction of the collodion may cause ectropion. Drainage is seldom needed in wounds of the face and should be avoided whenever possible, as it tends to increase the disfigurement from scarring. The silk sutures should usually not be allowed to remain more than five days. The catgut may often be removed earlier.—*Philadelphia Polyclinic.*

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LABORATORY WORK IN MEDICINE.—The importance of laboratory work in medicine was strongly advocated by Surgeon-General Sternberg in a recent address. His summary of the progress made in bacteriology and pathology is a model.

"Ths development of our knowledge relating to the bacteria," he said, "dates from the controversy relating to spontaneous generation, which was finally settled by the experimental demonstration made by Pasteur (1860), that no development of micro-organisms occurs in organic infusions which have been sterilized by boiling; and that fermentation and putrefaction depend upon the introduction of living germs into infusions. The distinguished French physician Davaine first demonstrated the etiological relation of a micro-organism of this class to a specific infectious disease. The anthrax bacillus had been seen in the blood of animals dying from this disease by Pollender in 1849, and by Davaine himself in 1851, but it was not until 1893 that the last named observer felt justified in asserting, as a result of inoculation experiments, that the bacillus was the essential etiological factor in the production of anthrax.

"In 1873 the German physician Obermeyer discovered the spirillum of relapsing fever in the blood of patients suffering from that disease. The typhoid bacillus was discovered by Eberth and indepentently by Koch in 1880. The same year the present speaker discovered the pathogenic micrococcus, which is now recognized as the cause of croupous pneumonia. In 1882 Koch

published his discovery of the tubercle bacillus. The glanders bacillus was discovered by Loeffler and Shutz in 1882; the bacillus of diphtheria by Loeffler in 1884; the bacillus of tetanus by Nicolaier in same year. It was also in this eventful year that Koch published the discovery of the cholera spirillum. Since these important discoveries our knowledge of the pathogenic bacteria has rapidly increased, and it is now demonstrated that erysipelas, septicæmia, puerperal fever, wound infections, boils and abscesses, peritonitis, pleurisy, etc., are due to general or local infection with germs of this class.

"Evidently the medical student of the present day must be made familiar with the recent additions to our knowledge of disease, and his acquaintance with these miscroscopic foes of the human race should be of that practical character which can only be obtained in the laboratory."—*Amer Med. Review.*

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Acetanilid Heals Chancroids in From One to Seven Days.—Dr. Thomas S. K. Morton is reported as saying in the *Philadelphia Polyclinic* that upon "chancroids the effect of acetanilid is most surprising." He states that all soft, venereal sores (chancroids) and inflammations "have uniformly healed in from one to seven days, with a single exception," which one was of a phagedenic nature, and required cauterization with nitric acid before it would heal under the acetanilid. He prescribes a drachm of powdered acetanilid. The patient is to wash several times daily and then rub in the dry powder. If the sore is beneath the prepuce leave a quantity of the drug inside, which prevents excoriations by urethral discharges. The drug is entirely wanting in odor.—*Va. Med. Monthly.*

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Sodium Phosphate in Exophthalmic Goitre.—Dr. D. L. Moore has (Columbus Med. Journal) had contact with four cases in which the rapid subsidence of all annoying subjective symptoms and gradual diminution in size of the thyroid could be attributed to nothing else but the daily administration of sodium phosphate. In one case of recent origin the improvement began and in less than two months the patient was practi-

cally well. In the other three cases the improvement of objective symptoms was more gradual. The patients were at once made comfortable by the relief of tachycardia and sensations of heart and there was a marked decrease in the struma and exophthalmus.—*Med. Standard.*

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PUERPERAL FEVER.—There is first a chill, then fever, face is flushed, there is a sensation of weight in the stomach, shortness of breath, restlessness, with a temperature of 104° and coated tongue. Give the liver a slight stimulation, quinine in full doses to control fever, with chlorate of potash, a small amount to each dose of quinine. Also give muriated tincture of iron in ten-drop doses every four hours until all fever is gone. Apply hot cloth over womb. Use vaginal injections of hot carbolized water every six or eight hours. Support patient by light but nourishing diet. Keep the patient quiet, comfortable and clean. Change the clothes often.—*Med. World.*

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ETHER AND CHLOROFORM.—The accumulated testimony of the past fifty years tends to prove conclusively that ether kills slowly, chloroform quickly; that ether kills by asphyxia, chloroform by cardiac paralysis; that ether gives plenty of warning, chloroform often none whatever; that ether is safer in healthy and strong people than in the weak and prostrated, but that chloroform is nearly as fatal in the vigorous as in the debilitated. Ether does not demand any especial skill in its administration; chloroform does. Proper treatment easily and effectually overcomes the unfavorable symptoms from ether; treatment oftentimes does no good whatever in accidents from chloroform. In short, ether is the safest general anæsthetic known; chloroform is not.—*G. W. Gray, M.D., in Boston Med. and Surg. Jour.*

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NEVER divulse the sphincter ani to its fullest extent unless the patient is thoroughly under the influence of an anæsthetic. The shock accompanying this procedure is intense, and unless all reflex action has been abolished there is danger of sudden heart failure. Incomplete or imperfect anæsthesia invites shock·—*Louisville Med. Monthly.*

# Editorial.

## OUR CENTENNIAL: 1786–1896.

The people of the State of Tennessee will celebrate this year the One Hundredth Anniversary of its admission into the great sisterhood of states by holding a magnificent industrial exposition in the city of Nashville, commencing September 1st next, and lasting one hundred days; and the invitation—special, is now extended to all the friends and readers of this journal to come and take part therein.

Yes, the gates of our capital city will be wide open, and we want you all to come and bring your wives and children, your sweethearts, your grand-pap and gra'ma, your uncles, your sisters, your cousins, and your aunts. Have no fears that you will not be well cared for in every way as regards your intellectual, your social and physical wants.

We quote and most heartily endorse the following from our Governor, Hon. Peter Turney, and we know that each and everyone of our citizens will vie with each other in carrying it out, both in letter and spirit:

"It will be our pleasure, with grateful hearts and patriotic pride, to call to mind the heroism and sacrifices of the men and women who made possible the Tennessee of to-day. We will review with pride the part Tennessee has taken in the affairs of our great republic, and it shall be our pleasant task to incucate in the hearts and minds of our children greater love for Tennessee, her sister States, and for the American Union."

It will be the earnest aim and sincere desire of our entire populace to give to it that magnitude and importance which the dignity of the occasion demands.

Maj. J. W. Thomas, so well and favorably known in connection with the N. C. & St. L. Railway, has been placed at the head of the enterprise, and is now bringing into full play and active exercise, his entire energies, experience and remarkable capabilities of organization and development, and it is needless to say that his interest will not flag, nor his ardor and enthusiasm abate until a most successful result has been obtained.

In a recent address to the citizens of Knoxville he said as follows:

"Let us have the firmness and determination of "Old Hickory," and say: "By the eternal, the Centennial must and shall be a success, a celebration worthy of the sons and grandsons, and successors of the men who hewed away the forest and fought the savages that they might add another State to the little nation which had driven the British from our shores and unfurled the stars and stripes to wave over the land of the free and the home of the brave.

For the present let us obliterate all county lines, ignore the three grand divisions of the State, and as Tennesseeans work to make the Centennial worthy of the pride of every man, woman and child from Carter to Shelby. We want a Centennial that will show our progress in the past, our achievements in the present, and one which will suggest the possibilities of the future. We want the people of the North, East, South and West to see what we have been, know what we are and surmise what we may be. We want them to see that we have twenty-three different kinds of minerals, sixty-six kinds of timber, seventy-two varieties of field, orchard and garden products, raising everything that is necessary to sustain animal life. We want them to see that we have the finest sheep, hogs, cattle and horses; that our men are as brave and true, and our women as intelligent and handsome as can be found on the face of the earth.

For 2,500 years expositions have been utilized as great national educators, and we propose to celebrate the One Hundredth Anniversary of our Statehood by having a grand exposition worthy of the State of Tennessee, and worthy of her forty-three sister States, which constitute the greatest, grandest, most glorious nation of all ages.

At a meeting of the stockholders of the Tennessee Centennial on Saturday the number of directors was increased from 100 to 200, and the President authorized to request the judges of the County Courts to nominate one director from each county, thus showing that it is our intention that the exposition shall be for the whole State and not for any particular section of the State.

Nashville and Davidson County, realizing that they will be greatly benefitted by this exposition, have subscribed $300,000, a sum sufficient to provide and beautify the grounds and erect all the buildings. Having secured this, we feel confident that the ninety-five counties, when they understand that they are not asked to aid in improving the grounds or erecting the buildings, will appropriate funds sufficient to make an adequate exhibit, and when they are properly arranged in the beautiful and commodious buildings we will have an object lesson which will be not only instructive to our citizens, but a revelation to thousands of visitors from other States, and an invaluable advertisement of the products and resources of Tennessee, which will secure for us increased population, increased wealth, and increased prosperity.

The reasons for having a grand Centennial Exposition are sentimental, patriotic and practical. Sentimental, because we will commemorate the heroism of the men who, in 1768, settled on the Wautauga, the Holston, the Clinch and French Broad; who, in 1772, formulated the Wautauga agreement; in 1777, organized Washington County, which embraced all of East and Middle Tennesssee; who, in 1780, fought at King's Mountain, and routed the British and Tories under Ferguson; and who, in 1784, organized the State of Franklin; and in 1796, at Knoxville, organized the grand State of Tennessee, under a constitution which remained unaltered for years.

Patriotic, because we will celebrate the One Hundredth Anniversary of this State, whose sons have achieved renown at New Orleans, at Monterey, at Vera Cruz, and on many other fields, and have been distinguished in the councils of the nation, at the bar, on the bench, and in the marts of trade, in agriculture, manufacturing and mining. Patriotic, because we will celebrate the One Hundredth Anniversary of the State which has given three Presidents to the United States, and whose remains rest beneath the soil of Tennessee to-day at the Hermitage, at Nashville, and at Greeneville.

Practical, because it will cause our citizens to appreciate more highly the value and variety of the products and resources of the State. Practical, because it will show to ten of thousands of visitors that Tennessee has more advantages than any other State, being favored with a climate unsurpassed in healthfulness, and with a soil adapted to a greater variety of products than any other section of this great country.

The trouble with Tennesseeans is, we are a modest and retiring people, content with our own surroundings, and in the consciousness of the superior advantages we possess in location, climate and soil; but I think the progress of the age demands that we should utilize these advantages by increased activity and increased production, which can be secured more effectually by a great object lesson, which will induce more capital and more people within our borders, and there is no reason why the population of the State should not be doubled, and its products quadrupled within the next ten years; and no better investment could be made by the ninety-six counties of the State than to appropriate $200,000 in order to properly exhibit their products and resources at the Tennessee Centennial.

It is proposed that the State of Tennessee shall keep pace with her sister States by having an exposition which will show to the citizens of other States what we are and what we have and thus invite them to share our advantages and prosperity.

The State of Tennessee, surrounded by eight of her sister States, having the advantages of all and disadvantages of none, is an ideal land, extending like a grand panorama, 100 miles in width from the grim-visaged sentinels of North Carolina, 450 miles west, to the Great Father of Waters. With rugged mountains, beautiful valleys, and broad, extended plains; with majestic rivers, murmuring brooks and sparkling fountains, sombre forests, green pastures and golden fields; beautiful flowers, luscious fruits and vine-clad hills with purple clusters. Grandeur and beauty harmoniously blended with lights and shadows, enrobing vast deposits of coal, iron, copper, lead, zinc, marble and slate, which have slumbered for ages in nature's repose awaiting the magic touch of labor and capital, which can readily be secured through the medium of a grand exposition commemorating the heroic events of the past, attractively presenting the advantages and resources of the present, and thus enhance the prosperity of the State as to secure a brilliant future for the people of Tennessee."

In the two hundred members of the directory the medical profession

will be well represented by some of the ablest of its members, whose associates and predecessors in times past have ever stood high in all that pertains to professional ability, dignity and courtesy, and it is needless to say that matters pertaining to this great science and art will be well cared for by them.

Quite a number of medical organizations will hold their annual meetings here during the progress of the Exposition, among which may be mentioned the Southern Surgical and Gynecological Association, the Tri-State Medical Association of Tennessee, Alabama and Georgia, and the Middle Tennessee Medical Association, and it goes without saying that each and all will be more largely attended than ever.

Our secular press has had this matter in hand for some time and have been unsparing in energy and space so far in getting this important enterprise well on foot. Doubtless many of our readers, especially those in the State, are already well advised as to the progress and developments attained. Now, at the beginning of our centennial year, THE SOUTHERN PRACTITIONER, feeling a most intense and abiding interest in so important an undertaking, essays its humble efforts, and our readers may from this time on expect to be kept informed of, at least, the general progress of the work.

The grounds, magnificent in proportions, immediately adjacent to the city, with electric and railroad communication, all that could be desired at the outset and which will be made as perfect and convenient as possible, are, after a considerable amount of labor to enhance their already remarkable advantages, now ready for the buildings, the principal ones now being under contract with full and complete architectural plans and details of the highest type of art.

Yes, we are going to "put the big pot in the little one," "the latch-string of the city hangs on the outside," "and don't you forget it." Yes, we want everybody to come—from the Atlantic to the golden shores of the Pacific, from the granite hills and rock-ribbed shores of Maine to the Gulf.

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## THE MEDICAL CORPS OF THE NAVY.

Two bills have been brought before Congress looking to a new organization of the United States Navy, Medical Department. One provides for a Surgeon-General with the rank of commodore; fifteen medical directors with the rank of captain; fourteen medical inspectors with the rank of commander; fifty surgeons with the rank of lieutenant-commander, and sixty with the rank of lieutenant, and forty junior-grade surgeons with the rank of junior lieutenant. The other bill provides for fifteen medical directors ranking as captains; fifteen fleet-surgeons ranking as commander; twenty staff-surgeons ranking as lieutenant-commander; thirty-five as lieutenants; forty junior-grade surgeons as junior-grade lieutenants; and thirty assistant surgeons ranking as ensign. The latter bill does not provide for a surgeon-general, and the former provides for

fourteen more commissioned officers than the latter. In the event of either passing, it will be well enough for the friends of the Navy Medical Department to see well to it that a more adequate recognition of the services of medical men obtains hereafter. The status of our medical men in the Navy has been a disgrace to an intelligent government and grossly unjust to most deserving gentlemen of a high order of scientific attainment. There is ample room for improvement—let us have it.

## GRIM-VISAGED WAR.

The closing days of 1895 developed the correspondence of Secretary of State, Olney, its reply by England's Prime Minister, Salisbury, and the remarkable message from his Excellency, the President of the United States in regard to the Venezuela boundary, stirring up our more than sixty millions of people, causing our members of Congress to tumble over one another in their haste to get in resolutions apropos, and even developing a most remarkable want of decorum in that staid and stately body, the United States Senate, in session assembled.

Republicans, Democrats, and Populists; Gold-bugs, Silver-sides, and Greenbackers, all were ready to devote millions of money to prevent "G. B." from appropritaing a miserable bit of marsh land teeming with malaria aad other venomous poisons, the whole not worth as much as a good Tennessee or Kentucky blue-grass farm; and our whole population from a senator to a scavenger-cart driver were more than willing to sacrifice innumerable valuable lives for the protection of territory that is not worth as much to-day as would have been twenty-five able-bodied voters of African scent a little over a third of a century ago.

This is all very well in its way—we yield to none in patriotism and patriotic motives, and while the Monroe doctrine is good in its way, we would like very much to see its application in matters of more importance to those living to-day and yet to be born and inherit this great country.

Why cannot our authorities show a like alacrity in providing effectual and rational measures to prevent invasion by far more dread enemies than the "blarsted Britishers?" Why not a little Monroe doctrine in regard to infectious, contagious and preventable disease? There is not a day nor an hour, safe and secure as we may seem in these unwonted healthy times, that dire and dreadful diseases, preventable as we now know them to be, may cause more death, more loss and commercial disaster than even a war with that trim little sea-girt isle, in whose domain the sun ever shines.

Why, yes, oh, why, cannot our lawmakers give us such enactments as will put us on a war footing, find us ready at any and at all times to resist the encroachments and visitations of preventable diseases? Why cannot Senators and Representatives of all parties be alike unanimous in providing this great people with a *Department of Public Health* commensurate with the importance of the numbers and value of our citizens, their wives, their children and their lives, comfort and prosperity?

In all probability the present "war scare" will soon be over. "*Common sense*," says Gladstone, will be ample to provide for it intelligently and satisfactorily. At least we hope so. Having been whipped once, we claim to have in a certain degree a personal knowledge of war, and we don't want any more of it if it can be helped. We also have some knowledge of the losses, the suffering, the grief, the distress and anguish due to preventable diseases, and we would very much like to see a reasonable application of the "Monroe doctrine" thereto.

A little less "Arkansaw Traveler," Mr. President, our honorable Senators and Representatives. The roof had better be repaired before the storm comes—it will cost less, both in lives and money.

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## OUR ADVERTISERS.

We begin the initial number of the year with a larger and more satisfactory advertising clientele than any previous year; furthermore, exercising a careful surveillance over this department of the journal, which has ever been our care, we can say without hesitation that in the entire list will not be found a single article that is not well deserving a thorough trial, while many of them are of well-known, long-tried and established excellence and reputation.

PHILLIPS' EMULSION OF COD-LIVER OIL is permanent and palatable.

VINO-KOLAFRA is a waste-restraining tonic of the highest order.

SYR. HYPOPHOS COMP.; FELLOWS', has had many imitations and but few if any equals.

ARSENAURO is a remarkable alterative tonic, increasing both quantity and quality of red blood corpuscles.

HAYDEN'S VIBURNUM COMPOUND is a boon, indeed, in the ailments of women and in obstetric practice; and the URIC SOLVENT (Hayden's) is a scientific combination for renal disorders.

SCOTT'S EMULSION has two important characteristics—integrity and palatability.

BROMIDIA is an old favorite the world over, and with its companions, PAPINE and IODIA, all are now standard.

MALTINE WITH COD-LIVER OIL, rich in diastase, is a concentrated predigested food, digesting alike both fat and starch.

PASKOLA is a readily-assimilable form of nourishment, both a digested food and a digester of foods.

ALETRIS CORDIAL has justly earned a wide and extended reputation in uterine disorders.

PROTONUCLEIN is the great producer of leucocytosis, preventive and prophylactic; and PEPTENZYME will render you valuable service in cholera infantum and like troubles.

WAYNE'S DIURETIC ELIXIR is used by Prof. W. Frank Glenn and

many other specialists in all irritations of the kidneys, bladder, urethra, prostate, etc.; the TONIC APHRODISIAC TABLETS (Wayne) are composed of phosphorus, nux vomica, damiana, saw palmetto and coca.

LISTERINE is antiseptic and prophylactic, non-toxic and non-irritant, for external and internal use.

THE PHYSICIAN'S COMPLETE BOOK OF RECORDS (Keystone Publishing Company) is in daily use by thousands of doctors.

FEHR'S COMPOUND TALCUM is a most excellent sprinkling powder, good in all affections of the skin.

FEBRILENE in malarial regions makes the baby laugh, wax fat and grow old gracefully and normally.

PURE VEGETABLE GLUTEN and "Other Standard Products" of the laboratories of Messrs. Theodore Metcalf & Co., have attained a most enviable reputation in the hands of active practitioners.

ROBINSON'S HYPOPHOSPHITES is nutritive, tonic, alterative and a standard remedy in pulmonary complaints; and ROBINSON'S LIME JUICE AND PEPSIN is a pure concentrated pepsin, made palatable with lime juice.

VIN MARIANI nourishes, fortifies, refreshes, aids digestion, strengthens the system and is an agreeable tonic stimulant without unpleasant reaction.

TONGALINE, liquid or in tablets, is a *sine qua non* in rheumatic affections. It has never disappointed us.

DIOVIBURNIA, NEUROSINE and SENNINE are well and favorably known to many of our readers. If you have not tried them, fail not to avail yourself of an opportunity.

THE SEWANEE MEDICAL COLLEGE, located on the top of the Cumberland Mountain Plateau, is a healthful and most excellent institution, and will be open from May 21st next. Write to the Dean for catalogue and full particulars.

MARSHALL'S SADDLE-BAGS can be converted into a most complete buggy-case, made of best material and in the highest style of workmanship.

GLYCOZONE and HYDROZONE (Marchand's) have never failed to give satisfaction. No disappointment has ever resulted except when a substitute has been palmed off on the unwary and unsuspecting. Bear it in mind, the more excellent a preparation the greater likelihood of substitution.

WILLIAM R. WARNER & CO.'S BROMO SODA, INGLUVIN and SUGAR-COATED PILLS have well won a world-wide reputation. Why go to the springs when with WARNER & CO.'S LITHIA TABLETS you can make water *just as easy*.

COLDEN'S LIQUID BEEF TONIC and SVAPNIA, or purified opium, are too well and widely known to need commendation at our hands.

The CALIFORNIA FIG SYRUP is an ideal, safe family laxative, to which special investigation of the profession is invited.

The CINCINNATI SANITARIUM is a most excellent private hospital for mental and nervous diseases, opium habit, inebriety, etc., at College Hill, Hamilton County, O. Write to Dr. O. Everts, Superintendent, for particulars.

SANMETTO is specially valuable in prostatic troubles, pre-senility, difficult micturition, urethral inflammation, irritable bladder and ovarian pains.

JENNINGS' BUSINESS COLLEGE will qualify your sons or your friends' sons with a correct business education—a most practical school of established reputation.

MELLIN'S FOOD, prepared according to directions, is a true Liebig's food, and the best substitute for mothers' milk yet produced. Try it and you will agree with us.

ANTIKAMNIA, in POWDER or TABLETS, is a most excellent remedy in influenza.

LISTERINE is the standard of antiseptic preparations. The imitators all say "it is something like Listerine."

The NASHVILLE, CHATTANOOGA & ST. LOUIS RAILWAY is the best equipped and most handsomely furnished road in the entire South.

MCINTOSH BATTERIES have no equal for durability and perfection of work.

BELLEVUE HOSPITAL MEDICAL COLLEGE. Send to Prof. Austin Flint, M.D., Secretary, East 26th Street, New York City, for catalogue.

WHEELER'S TISSUE PHOSPHATES is a nerve food and nutritive tonic, valuable in consumption, bronchitis, nervous debility, etc.

The PRIVATE SANATORIUM FOR WOMEN of Dr. Richard Douglas is a most elegant and commodious building, handsomely fitted with all modern conveniences and thoroughly equipped in every detail for the management of gynæcological cases and abdominal surgery.

MR. THEO. TAFEL, 153 North Cherry street, Nashville, Tenn., can supply you with any surgical instrument or appliance that you may need. If he does not have what you want on hand, he can soon make it. He is reliable, a good workman and keeps nothing but the best.

SCHERING & GLATZ, 55 Maiden Lane, New York, N. Y., will furnish you on application valuable literature in regard to Creosotal (Creosote Carbonate) and Guaiacol Carbonate.

HELONIA TABLETS afford a simple and efficacious method of treatment or leucorrhœa and vaginal discharges without the uncertainty and annoyance of medicated vaginal injections.

PABST MALT EXTRACT received the supreme award at the World's Fair as the "best tonic." Excellent for the nursing mother.

PEACOCK'S BROMIDES is one of the best combinations we have ever tried. CHIONIA is a most excellent hepatic stimulant. CACTINA PILLETS are indicated in abnormal heart action; SENG in malnutrition and indigestion.

MESSRS. PARKE, DAVIS & Co., of Detroit, Mich., with branch establishments at New York, Kansas City, Walkerville, Ont., and London, England, have done much, indeed, with their extensive establishment in behalf of medical science. The many new remedies introduced by them, the perfect and satisfactory preparation of old remedies, their fluid extracts, elixirs, pills, etc., are well and widely known. If any reader of this journal is favored by a call from any representative of this house he may rely upon meeting a gentleman, courteous and well qualified, and the time devoted to him will be well spent.

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APOLYSIN, A NEW ANTIPYRETIC AND ANALGESIC.—As a study of the relation between pharmaco-dynamic action and chemical constitution amongst several aromatic compounds the new remedy, Apolysin, has lately been the object of much attention in the Warsaw and St. Petersburg hospitals.

Apolysin is nearly related to phenacetin with this difference, that instead of being an acetic acid derivative of para-phenetidin, citric acid takes the place of acetic acid. Apolysin is a yellowish white crystalline powder of acid taste, though not so distinctly acid as citric acid itself, which dissolves in cold water in the proportion of 1 to 55, and in hot in any proportion. It melts at 72° C. In other respects Apolysin closely corresponds in chemical behavior to phenacetin.

Present knowledge of pharmacodynamic relations indicated that Apolysin from its constitutition would be non-poisonous, split up into para-phenetidin, ethyl and citric acid in the organism, producing a reduction of temperature and analgesia, and the phenetidin eliminated in the urine in the form of a glycuronic or sulpho-compound.

The absence of toxic properties in Apolysin was proved by experiments on frogs and rabbits, one, four and eight per cent. aqueous solutions being gradually injected in the proportions of ½ to 4 parts Apolysin to 1000 parts animal body-weight. The frogs as well as the rabbits bore the injections well and without any disturbance to the health or general condition. The products of the decomposition of Apolysin were found in the urine of the rabbits combined with sulphuric acid. The urine possessed the same behavior towards reagents as after the administration of phenacetin. Compounds of glycuronic acid could not be discovered.

Before administration of Apolysin to fever patients its antiseptic action was first tried on animals. For this purpose two rabbits were taken, in one of which diphtheritic toxine, in the other a pure cultivation of pyogenous streptococci was injected. The temperature of the animal inoculated with toxine rose after three hours to 39.6° C., and on the afternoon of the second day to 39.8° C., 1 c.c. of a 10 per cent. aqueous Apolysin solution was injected. The temperatnre rose in the evening to 40.5° C., but on the next day the morning, afternoon and evening temperature were 40.1°, 39.5°, and 39.2° C. respectively, and on the fourth day at the same hours 39.5°, 30.1°, and 39.0° C. The second animal inoculated with pyo-

genous culture exhibited a temperature of 40.3 C. in the evening, and the next morning at 40.1° C., 1 c.c. of a 10 per cent. aqueous Apolysin solution was injected at eleven; at twelve o'clock the temperature fell to 39.4° C., at three o'clock 39.3° c., at seven o'clock 40.2° C., and nine o'clock 40.1° C.

Progressing to clinical observations Apolysin has been employed for the purpose of testing its antipyretic and analgesic properties in the following cases: 4 cases of croupous pneumonia, 1 case of scarlatina, 1 case of abdominal typhus, 13 cases of influenza, 2 cases of puerperal fever, 1 case of pyæmia, 5 cases of angina follicularis, 1 case of facial erysipelas, 3 cases of hemicrania, 2 cases of sciatica, 7 cases diagnosed generally as cephalagia, 3 cases of neuralgia nervi trigemini, 1 case of neuralgia cervico-occipitalis, and 2 cases of neuralgia plexus lumbalis. The Apolysin was generally administered alone in powdered form, in doses of 15 grains three times daily at intervals of an hour, and only in a few cases was it combined with bromides, and twice with caffiene salts.

From these investigations and clinical observations the following conclusions have been determined:—Administered internally Apolysin has an antithermic action on fever patients, and, simultaneously with the fall of temperature, brings about the disappearance or abatement of quite a series of symptoms, especially painful symptoms.

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In neuralgias, Apolysin has an analgesic action, diminishes hyperæsthesia, shortens the duration of single attacks, and often causes the symptoms to disappear entirely.

Thanks to its chemical constitution, Apolysin acts quickly and safely, and as far as the observations have been conducted, does not cause any unpleasant symptoms.

The administration of Apolysin is contra-indicated on empty or fasting stomachs, or where there is an excess of acid secreted.

Apolysin is easily soluble, and is therefore more quickly absorbed, and more reliable in its action, than phenacetin, and similar remedies.

Apolysin is practically non-toxic, and, consequently, can be given in large doses in order to produce analgesic and antipyretic effects rapidly, without danger of by-effects. Herein lies the principal advantage of Apolysin.—*Abstract from L. von Nencki and J. von Jaworski, in London Therapist, Oct. 15th*, 1895.

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THE usefulness of good Hypophosphites in Pulmonary and Strumous affections is generally agreed upon by the Profession.

We commend to the notice of our readers the advertisemcnt in this number of "Robinson's Hypophosphites" also "Robinson's Hypophosphites with Wild Cherry Bark;" (this is a new combination and will be found very valuable), both are elegant and uniformly active preparations; the presence in them of Quinine, Strychnine, Iron, etc., adding highly to their tonic value.

E. B. TREAT, Publisher, has in press for early publication the 1896 "International Medical Annual," being the fourteenth yearly issue of this eminently useful work. Since the first issue of this one volume reference work, each year has witnessed marked improvements; and the prospectus of the forthcoming volume gives promise that it will surpass any of its predecessors. It will be the conjoint authorship of forty distinguished Specialists, selected from the most eminent Physicians and Surgeons of America, England and the Continent. It will contain reports of the progress of Medical Science at home and abroad, together with a large number of original articles and reviews on subjects with which the several authors are especially associated. In short, the design of the book is, while not neglecting the Specialist, to bring the General Practitioner into direct communication with those who are advancing the Science of Medicine, so that he may be furnished with all that is worthy of preservation, as reliable aids in his daily work. Illustrations in black and colors will be consistently used wherever helpful in elucidating the text. Altogether it makes a most useful, if not absolutely indispensable, investment for the Medical practitioner. The price will remain the same as previous issues, $2.75.

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THE COLLEGE AND CLINICAL RECORD will be hereafter known under the name of *Dunglison's College and Clinical Record*, a monthly journal of practical medicine. And a good one it is too—in subtance as well as in name.

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BAILY & FAIRCHILD Co., of New York take pleasure in announcing to the medical profession the establishment of the "Doctor's Story Series," to be issued quarterly at $2.00 a year, 50 cents a number. Each number will consist of a complete work of fiction by medical authors. Only such works as are of established value will be reproduced in this popular form. King's "Stories of a Country Doctor" will be issued January, 1896 to be followed in March by Dr. Phillips' wonderful novel "Miskel," and later by a new novel in preparation by the same author.

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ARTICULAR RHEUMATISM.—Dr. F. W. Stewart, late Assistant Physician to Milwaukee County Hospital, reports excellent results from the use of Lambert's Lithiated Hydrangea in the treatment of two cases of complicated articular rheumatism due to excess of uric acid in the system, and which had resisted the remedies usually prescribed in such cases. The lithiated hydrangea was administered in one dram doses three times daily; the effects were prompt and satisfactory, a complete recovery resulting after two weeks' medication and diet.—*Peoria Medical Monthly.*

HEADACHES OF EXTRA-CRANIAL ORIGIN.—In the discussion following the reading of this paper Thomas Hunt Stucky, M.D., Ph.D., Professor of Theory and Practice and Clinical Medicine, Louisville, Ky., said: "The paper just read is to me one of unusual interest and importance. When we take into consideration the many causes of headache, and look back upon the treatment for the past twenty years for the condition by opium or its alkaloids, chloral, the bromides, etc., and remember their tardiness of producing relief, the danger of having our patients become drug-habitues, 'tis, indeed, a fact that antikamnia has proven a God-send to the people, as well as the profession. One fact is evident, and that is that antikamnia has almost entirely displaced opium, its compounds and derivatives. If it has done this and nothing more its mission is a great one and its usefulness thoroughly established. 'It does not depress the heart's action; it does relieve pain. An extended use from its first appearance on the market has served to increase my confidence in the great value of antikamnia.'"—*Dr. Frank Woodbury, in Medical Record.*

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PERMANENT AND RELIABLE.—A letter from Dr. Policarpo Diaz, of Guanajuato, Mexico, to Scott & Bowne says that in 1889 he purchased twenty bottles of Scott's Emulsion. At that time he was "suffering from a terrible attack of tuberculosis." He says he does not now have the slightest symptom of that disease and is in the best of health. He adds that at the time of writing, April, 1895, he has one of these twenty bottles on hand, and "although enough time has certainly elapsed for the Emulsion to separate, yet it is in perfect and unchanged condition."

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ARTISTIC.—Our readers will notice the artistic advertisement in this issue of "Dioviburnia," the most powerful uterine tonic attainable, antispasmodic and anodyne which has simplified the practice of gynecology; a reliable and trustworthy remedy for the relief of dysmenorrhœa, amenorrhœa, menorrhagia, leucorrhœa, subinvolution, threatened abortion, vomiting in pregnancy and chlorosis, directing its action to the uterine system as a general tonic and anti-spasmodic. It is unexcelled.

This product being manufactured by the well-known Dios Chemical Company, of St. Louis, is sufficient guarantee of its reliability.

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CHREMATOPHOBIA is the name newly coined by *The Southern California Practitioner*. The *fear* of *money* has no dread terrors for us. The dread is rather that we cannot get it. Possibly germs, bacteria, bacilli, micro-cocci or some other kinds of cocci may adhere to the filthy lucre that drifts hitherward. Bank clerks possibly may contract tuberculosis from the bacilli-laden lucre committed to their charge—but it is *a—chrematophobia* with us "all the while," as our good, venerable and reverend

teacher, Dr. John M. Watson, used to say so often. A nickel, though blackened by transit through the long route from *os* to *anus* of some luckless urchin, newsboy, bootblack or gray-haired auntie, will pay street-car fare just as readily as one fresh from the mint; and a silver $, or even one of ragged paper, teeming with microbes, will always be acceptable and will command in return twelve monthly numbers of THE SOUTHERN PRACTITIONER.

Oh, no! my dear friends, do not be afraid of communicating any infectious diseases whatever to any of the attaches of this office—from devil to editor—but send your subscriptions right along for 1896, and rest assured that they will not linger with us long enough to endanger our valuable lives. You send the money, we will take the risk.

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MESSRS BATTLE & CO., ST. LOUIS: Some time ago you sent me specimens of your preparations of Bromidia, Papine and Iodia. Unlike many who send out specimens, you sent an amount large enough to really make a trial with. I had used the two first named a little, but having them more forcibly brought to mind, I watched their action more carefully. I can say that they are both elegant and health-bearing. Bromidia I used on a man verging on mania a potu, Papine on a nervous typhoid woman, and Iodia on a young man who had carried boils for three years as the result of ivy poisoning. The preparations were a decided success in every instance. Yours truly, E. C. ADAMS, M.D.

Watertown, S. D., December 10, 1895.

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ATTENTION, READERS! Our readers will please look carefully over the advertising pages of this number—much of interest will be found therein. ESPECIAL ATTENTION is called to the last four advertising pages in which special club rates are offered to new subscribers and renewals of subscription for 1896.

*For One Dollar and Fifty Cents* this Journal and the American Agriculturist (Southern and Western Edition) and Weather Forecasts and Farmer's Almanac will be sent for 1896.

*For One Dollar and Seventy-five Cents* this Journal and The Cosmopolitan Magazine will be sent for 1896.

*For Three Dollars* this Journal and The Lancet will be sent for 1896, and Pozzi's Gynecology.

*For Two Dollars and Twenty-five Cents* this Journal, The Cosmopolitan Magazine, The American Farmer's Almanac and Weather Forecasts, and The American Agriculturalist (Southern and Western Ediition), will be sent for 1896.

*For Five Dollars and Twenty-five Cents* all of the above will be sent. Remit by Certified Bank Check, P. O. Order, or Express Money Order or Currency in Registered Letter to

DEERING J. ROBERTS, M.D.,
Editor and Proprietor,
Nashville, Tenn.

*This offer holds good for the current month.*

# Reviews and Book Notices.

SUPPLEMENT TO THE INTERNATIONAL ENCYCLOPÆDIA OF SURGERY. Edited by JOHN ASHHURST, Jr., M.D., LL.D., Philadelphia. One royal volume of 1,136 pages, illustrated by numerous wood-engravings and a chromo-lithographic plate, cloth, $7.50; leather, $8.50. To subscribers to the entire set, cloth, $6.00; leather, $7.00, and half morocco, $8.00. WILLIAM WOOD AND COMPANY, Publishers, 43, 45 and 47 East 10th Street, New York, N. Y.

Strictly speaking, this is a supplement to the International Encyclopædia of Surgery, forming the seventh volume of that series. It is, furthermore, an indispensable book to every professional man interested in surgery, and is equally a supplement to any and all of the works upon the subject which he may have in his library.

It aims to go over the entire field and bring down to date the very numerous topics which it covers. No less than forty-eight distinguished surgeons have contributed to the work, and become responsible for its "up-to-date" character.

Those who already possess The International Encyclopædia of Surgery can, at a comparatively small cost, obtain every thing needed to complete their surgical library. As stated in the preface, it makes "no claim to be an ephemeris of novelties, but rather to be a trustworthy digest of accepted and established fact."

Notwithstanding the size of the book and its handsome mechanical execution, it is sold to those who possess the preceeding volumes of the series at the same price as paid for them, namely, $6.00 in muslin, $7.00 in leather, and $8.00 in half morocco. To others who desire to purchase the book as a complete summary of modern surgery, it is sold at the very moderate prices of $7.50 in muslin and $8.50 in leather, net, and as it is a subscription book, orders must be sent direct to the publishers, by mail or through their authorized canvassers.

# THE SOUTHERN PRACTITIONER.

AN INDEPENDENT MONTHLY JOURNAL,

DEVOTED TO MEDICINE AND SURGERY.

SUBSCRIPTION PRICE, ONE DOLLAR PER YEAR.

*DEERING J. ROBERTS, M.D.,* - - *Editor and Proprietor.*

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## Original Communications.

### DISEASES OF THE PYLORUS.*


DEERING J. ROBERTS, M.D., NASHVILLE, TENN.


*Gentlemen*—This subject having been assigned me by the Committee on Essays it will be perhaps well enough that a few preparatory words of definition be submitted to you. Taking the stomach as a whole, it is usually divided for the purposes of of description into three parts—possibly from its near relationship to the gall, as most of us have been taught in our juvenile days that *omnia gallia in tres partes divisa est*, etc., or probably from the great prominence given to matters both celestial and terestrial to the Trinity.

That third lying to the left and into which the œsophagus enters, being known as the cardiac or greater extremity, that lying to the right and opening into the duodenum, is termed the

* Read before the Nashville Academy of Medicine.

pyloric or upper extremity, the middle division lying between the two.

The stomach is provided with three layers of muscular fibres. 1. External longitudinal, a continuation of those of the œsophagus. 2. Middle circular. 3. Internal oblique. The longitudinal fibres are most marked over the lesser curvature, and at the pyloric extremity; they are not continued very distinctly over the rest of the stomach. The circular layer is not very distinct to the left of the cardiac opening over the great pouch, being more prominent over the middle portion, and largely developed in the pyloric, and at the junction of the stomach with the duodenum forms a powerful muscular ring. At this point they project considerably into the interior of the organ, almost abruptly ceasing at the opening into the duodenum, so as to form a sort of valve, presenting when contracted, a flat surface looking toward the intestine.

The oblique fibres take the place, to a great extent, of the circular fibres over the great pouch, extending obliquely over the fundus from left to right, and moving at a distinct line about the junction of the middle with the pyloric portion of the stomach. At this point the stomach becomes constricted during the movements which are incident to digestion, dividing the organ into two tolerably distinct compartments—the cardiac extremity and middle portion forming one, and the pyloric extremity the other.

As a consideration of the diseases of the pyloric portion of the stomach would confine me to that of diseases of the stomach, and would occupy entirely too much time and space for a paper of twenty minutes reading, I shall confine myself to a brief consideration of the morbid conditions pertaining to the pylorus itself.

In the first place, while the stomach is occasionally absent in a cephalic monster, yet more rarely it is to be found abnormally small in fœtuses which are otherwise well developed; and while complete atresia, congenitally, of the pylorus is very rare, yet stenosis or abnormal contraction is more frequent.

While possibly we may have occasionally, a deficient contractility of the pylorus, and a too great potency of its lumen, producing a temporary diarrhœa by permitting the alimentary

masses to pass into the small intestine before gastric digestion is completed, it is to conditions of *stenosis* and obstruction of this orifice that pathological phenomena are almost exclusively attributed.

Obstruction to the passage of the contents of the stomach into the duodenum is not infrequent, and it may arise from very different pathological conditions.

1. Cancer of the pyloric end of the stomach surrounding the opening and gradually spreading to the intestines. The muscular fibres become hypertrophied, the contractile fibres enlarged and increased in number, in some cases becoming condensed into dense fibrous tissue. Not only obstructing the passage of the gastric contents by closure of the lumen of the orifice, but by preventing those contractile movements by which they are forced onwards.

2. Fibroid thickening of the submucous tissue as an accompaniment of cirrhosis of the stomach occurring independently. This may be confined to the pylorus itself, or may extend some distance back, producing a hard, leathery condition of the gut. The same effect, although to less degree being produced in cancer. The muscular bundles become hypertrophied, their contraction being embarrassed by the tough, fibrous tension separating them.

3. Gastric ulcer, located at the pylorus, may produce spasmodic contraction during its existence, or permanent stenosis by reason of cicatricial contraction after healing; or destruction of muscular fibres may prevent the forcing onwards of the alimentary mass.

4. Tumors in the vicinity, lipoma, carcinoma, fibroma, an occluded and distended gall-bladder, a floating, dislocated kidney, a fecal impaction of the hepatic flexure, or transverse colon, etc., may so press upon the pylorus as to occlude it.

5. Adhesions may form between the duodenum or pylorus and adjacent parts, and in this way produce a difficulty in the passage of food from the stomach.

The principal effect of any considerable obstruction of the pylorus is a greater or less degree of dilatation of the stomach. This invariably occurs. In fact, but few cases indeed of dilatation of the stomach occur, independent of pyloric obstruction. The most prominent clinical phenomena are vomiting occurring

at irregular intervals, usually, and several hours after taking food, heartburn, pyrosis, other symptoms of indigestion, constipation and gradual and progressive emaciation.

While gastrectasia or dilatation of the stomach may be due to weakness of the muscular tone of the stomach from imperfect nutrition in cases of anæmia, chlorosis, exhausting acute or chronic disease, amyloid degeneration of the gastric arteries, chronic gastritis, dyspepsia accompanied by stagnation and fermentation of the gastric contents, polydipsia, polyphagia independent of, or attendant upon diabetes, when it results from stenosis of the pylorus, it always reaches a more extreme degree than from any other cause, and the clinical features due to other causes are absent.

In regard to vomiting, Flint very correctly says, "that it occurs almost without exception when dilatation is due to pyloric obstruction, and in other cases it is a frequent but not a constant symptom."

The characteristic features as regards this symptom are the occurrence of the vomiting after periods varying from a day to several days, the large quantity of matter vomited at a time, absence of nausea and retching, and freedom from bile. The matters vomited are acid, and frequently in a state of fermentation, as indicated by froth containing gas. Sarcinæ, yeast-fungus, bacteria and crystals of fatty acid are found. Acetic, lactic, butyric and other organic acids are usually present. According to Van der Welder, hydrochloric acid is persistently absent when the obstruction is due to cancer. Alimentary matters vomited may have been retained in the stomach for several days—this being regarded as somewhat diagnostic. In the unobstructed stomach food partaken of one day is usually digested by the next, or rejected. Repeated attacks of vomiting without a great degree of effort, retching or nausea, and masses of food that have passed into the stomach several days preceding are strong indications that the power of the stomach to propel the food into the duodenum is wanting.

The persistent constipation, unattended by fecal accumulations in the small or large intestine also add to the characteristic features of occlusion of the pylorus.

Although the diagnosis of pyloric obstruction is somewha

difficult in its incipiency, yet as the disease progresses it gradually becomes more and more clear. A greater difficulty, that even sometimes projects itself until the end, is a discrimination as to the particular pathological cause producing it. A few brief points will be briefly cited. While all conditions, unless relieved by nature, aided or unaided by art, are as a rule fatal, and while the obstruction from any cause may be followed by fatal results in from a few weeks to a few months, cancerous disease as a rule will rarely, if ever, be protracted beyond one and a half years. Either from cancerous infiltration of adjoining and adjacent areas and viscera, or the gradual but rapid development of a cachetic condition due to malignant disease, but few cases indeed are protracted over a longer period of time.

In the matters vomited we rarely have indications of hæmorrhage other than in cancer or the eroding stage of gastric ulcer.

The absence of the cancerous cachexia, the absence of pain of an acute character, the ability to hold the patient up beyond the time usually observed in malignant disease, together with the development of but a limited degree of tumor beneath the cartilage of the eighth rib on the right, point more toward fibroid thickening. Malignant disease may be more confidently expected after forty-five or fifty years, yet the other conditions are not limited to prior ages.

It is to be regretted that we have no special diagnostic factors; one of some moment has been cited by Van der Welden, viz: the persistent absence of free hydrochloric acid in the matters vomited or removed from the stomach by artificial means. Several practical tests in this are given in Pepper's System of Medicine, Vol. II, page 544.

The mesures of treatment to be resorted to are to be found both in the domain of general medicine and surgery. In the early stages, and in fact until the diagnosis of complete or partial occlusion has been thoroughly established, our remedial measures should be limited to the former, leaving the latter as a *dernier resort*, or held in reserve until we are fully satisfied that other measures are futile, or that the patient is too rapidly succumbing by reason of progressive asthenia.

It is often, indeed, a most difficult matter to decide when to

abandon the expectant measures of general medicine and resort to explorative, if not curative operative measures—measures that sometimes show us conditions that we would rather not see. It is a question that can only be decided by a consultation, yet thorough judicial investigation of every fact and factor of the case; and it is only he who can weigh well each particular factor individually, and the whole mass of clinical testimony in its entirety that will be satisfied with the results in his opinion in such cases.

Among the expectant remedies of the therapeutic field first to be considered of paramount importance are dietary measures. By a carefully regulated regimen much suffering may be avoided, and even in those sad cases of malignant disease the bright star of hope may be enable to shine a little longer. The crippled stomach must be aided by rectal alimentation and the demands of nutrition placed at low water mark by a rigid abstinence from all unnecessary mental or physical exertion. As regards alimentation by the stomach it should be limited in quantity, and should consist only of milk, eggs, animal food and fish. Starchy and saccharine foods should be rigidly excluded. If bread is persistently demanded, let it be limited to gluten bread or that made from diabetic flour, almonds, etc. The lean of fresh meat, the juice expressed from freshly broiled tenderloin steak, concentrated meat extracts will render up a considerable amount of nutritive matter to the absorbents of the stomach, and aided by the judicious introduction of proper nutritious material into that second stomach, the rectum, life may be maintained for many days with complete occlusion of the pylorus. The character of food introduced into the stomach should be that which would leave but little residue to pass the barred gateway of the pylorus, or be rejected by the cardiac orifice.

In connection with rectal alimentations I will mention, that more than a year ago, having a good deal of trouble to get this portion of the alimentary canal to tolerate the ordinary fluid or semi fluid material used per enema, I found a most valuable substitute, and a far more convenient means in the large size gelatin capsules made by our capsule manufacturers. I found that the Parke, Davis & Co. Capsule No. 12 would hold at least half-an-ounce of any of the handy beef extracts and was more

easy of introduction, and more readily retained than an enema. Since then I have made frequent use of them for introducing both medicine and aliment into the system.

If fermentation and the development of gas persists in spite of the exclusion of starchy and sacharin foods, the anti-fermentative remedies may be used, such as creasote, creasotal, carbolic acid, the salicylates, or that excellent proprietary preparation Listerine.

Lavage of the stomach, introduced by Kussmaul in 1867, marked a new era in the treatment of gastric disorders, and more than one case of apparent permanent occlusion has been saved from the surgeon's knife of later days in the inevitable false result of former days, by washing out the stomach with the stomach pump or the more simple siphon. As a rule, washing out the stomach once a day is often enough in any case, in many, every two or three days will suffice. While Kussmaul recommends before breakfast as the most suitable time, I rather agree with Prof. Welch in occupying the half hour previous to the mid-day meal. It should not be resorted to any oftener than absolutely necessary, as determined by the degree of discomfort and uneasiness produced by gastric distension from decomposition of its contents in other causes.

The contents of the stomach being invariabiy acid in pyloric obstruction, occasional drinks of alkaline waters may be used, or the administration of carbonate of soda or other simple alkali. If there is much pyrosis and heartburn that is not relieved by anti-fermentation and alkaline measures, an occasion dose of bismuth s. nit., may be given.

Strychnia, from its property of stimulating muscular power, has been recommended and is worthy of consideration, in the hope that at sometime the obstruction may be overcome by making an occasional if not a continual pressure onwards of the gastric contents; furthermore, it is a most excellent tonic. For the constipation, although it is due partly to the diminution if not total cessation of material coming from beyond the pylorus, and partly to an absence of those reflex prestaltic movements incited by gastric digestion, it will be necessary to resort from time to time to a laxative pill of rhubarb, Carlsbad water, Blue Lick water, the natural or artifical Sprudel salt, or waters of this

class. Tonics, stimulants, anodynes, hypnotics, and other drugs have their appropriate places to be used when occasion requires, and only then.

Friction with oil, preferably, cod liver oil, to be followed in three or four hours by a good warm bath is not only agreable, but possibly some of the oil may be absorbed by the skin.

In regard to operative measures, as the discussion is to be opened by a gentleman who is more familiar with the glittering sheen o the scalpel of late years than myself, and as more than one member of this Academy is under the prevailing influence of the "cacoethes insecti," I shall be brief, and limit myself to a few historical data.

Gastrotomy and forcible divulsion of the contracted pylorus had yielded nine successful cases to Loreta from 1882 to 1884. It is limited to stenosis due to febroid hypertrophy and cicatricial contraction. It was first attempted by Schede in 1877, who was unsuccessful. Ashurst in his fifth edition (1889) gives a list of thirty-four cases, by various operators, nineteen successful, fourteen fatal, and one uncertain. Pyloric gastrectomy or resection of the pyloric extremity of the stomach, first suggested by the German Merrem, was first put into practice by Pean in 1879. Ashurst (op. cit.) gives a list of 119 cases by different operators. Billroth leads the lot with twenty-two cases and only eleven deaths. This measure may be resorted to in malignant disease, as a means of prolonging life, and in non-malignant cases where divulsion is impracticable. The younger and stronger patients, and those who were on the operating table the shortest time bore the operation best, It is necessarily a slow and tedious operation, and according to Druitt (12th edition) "no patient recovered when the operation lasted three hours." Billroth, one of the most expeditious operators, having the best record.

According to Ericksen (8th edition) V. Winiwarter originated the operation of gastro-enterostomy as he very properly termed it. He attempted an excision of the pylorus, but found it impracticable, and very ingenously drew up the lower part of the duodenum and established a fistulous opening between it and the great curvature of the stomach. Ashurst gives a tabulated list of sixty-two cases and twenty-four deaths. If resorted to,

Senn's decalcified bone plates, the cat-gut mats of Davis, or similar means will be of use. In cases where it was found applicable, attachment of some portion of the duodenum to the anterior surface of the pyloric extremity would seem preferable to a more dependent portion of the stomach; or a more direct part of the small intestines. The operation is applicable to all cases of permanent occlusion. Senn regards it questionable in stricture from cancer. The few weeks or months of life not compensating for the immediate risk of life.

In conculsion, I beg leave to state that the history of operative measures in connection with pyloric disease has originated and been developed during the time in which many of the members of this Academy have been connected with medicine, and it is one of the important features of recent—yes, quite recent—developments in the special field of abdominal surgery. And while its results have been brilliant indeed, in some instances absolutely snatching the patient from the very brink of the grave and restoring him to health; in others, relieving suffering and preserving life, yet it is an open and an inviting field that must not be invaded indiscriminately, but only after carefully and well weighing every phenomena connected therewith.

The very interesting case, some weeks ago so graphically delinated by Drs. Buist, Douglas and yourself, Mr. President, while not purely a case of pyloric disease, is quite germane in its relation to pyloric obstruction, and the results of the autopsy in an adjoining state, redound as much to the credit of the gentlemen connected with the case as the most brilliant achievement of gastrotomy, pyloric gastrotomy or gastro-eterrostomy.

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## HEMORRHOIDS.*

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Notwithstanding the fact we have specialists who treat diseases of the rectum, as general practitioners of medicine we are

*Read before the Nashville Academy of Medicine, May 12, 1892.

called upon frequently to treat patients suffering with hemorrhoids, which is the subject of this paper.

Kelsey defines hemorrhoids to be "varicosities of the vessels of the rectum and anal region," while Ball defines the true pile, which he prefers, as a tumor originating in a diseased condition of the blood-vessels of the lower end of the rectum, the vessels having undergone dilatation and proliferation.

This disease is one long familiar to the profession, having been known even in the days of Hippocrates.

We must look for a cause or causes common to all classes, since the disease is found among the rich and the poor, the civilized and the uncivilized, the active and the inactive, in the male and in the female, and in the old and the young. An anatomical fact has been mentioned by some authors which may serve to explain the frequency of this troublesome disease is the source, relation and distribntion of the vessels of the rectum and neighboring parts, coupled with the fact that these vessels are placed in nearly a vertical position. That this latter fact has some influence in the production of this disease is proven by the noticeable fact that in the lower animals where these vessels run horizontally we fail to find any similar disease. The arterial supply of the rectum and anal region is derived from three different sets of vessels—viz.: The superior, middle and inferior hemorrhordial. The superior, the continuation of the inferior mesenteric, passes between the folds of the peritoneum which forms the meso-rectum, and is distributed to the rectum above the sphincter muscle. In its course it divides to form loops on either side of the bowel, from which branches are given off to pierce the muscular coat, after which the branches are distributed in the submucous and mucous coats. The middle and external, or inferior hemorrhodial are branches respectively of the internal iliac and pudic, and are distributed to the lower extremity of the rectum and tissues of the anal region.

The veins are arranged similarly. Those which return the blood from the mucous membrane and adjacent coats of the bowel originate in dilated branches located near the anus from which little venous radicles ascend, uniting with each other to form veins which finally pierce the muscular coat to form the superior hemorrhoidal vein which pours its contents into the

portal circulation. These venous radicles have no valves, and this, with the vertical position, the situation between the muscular and mucous coats, and the manner of passing through the muscular coat, may serve to explain the frequency of internal piles. The absence of valves allows the whole column of blood to rest upon the delicate walls of the vessels in the lower extremity of the bowel. The veins being located between the mucous and muscular coats are subjected to pressure as the hardened fecal matter is passing down the bowel, and in this way the venous current is obstructed; and, again, during strong muscular contraction the free return of blood may be impeded at the point where the veins pierce the muscular coat.

Besides the above, we may mention habitual constipation, displacement or enlargement of the pelvic viscera, diseases of the abdominal viscera, especially of the liver, the excessive use of alcoholic liquors and intemperance in eating as ætiological factors.

Hemorrhoids, if situated above or within the sphincter muscle, are designated internal in contradistinction to those found around the anus extended to the muscle, covered by integument and known as external. The latter form of hemorrhoids may, I think, very properly be divided into two divisions, as some authors have them—viz.: The cutaneous, which consists of a tag of skin varying in size and shape, and those due to rupture or dilatation of the veins. Some authors deny that the clot is ever found exterior to the vessel, but that it is always situated in a dilatation of the same. I am inclined to believe with Kelsey that the clot may be due to rupture of the veins, and is found on the exterior of the vessel. Ball states that when these tumors are incised that a solution of nitrate of silver will always show the endothelial coat of the veins covering the clot when placed under the microscope.

The cutaneous tag, mentioned as one variety of external piles, is probably developed from the venous variety—hyperplasia of the skin and connective tissue having taken place.

A third variety of the external hemorrhoids is mentioned by some authors which consists of a number of dilated veins, surrounded by more or less connective tissue.

The treatment of external piles is pallative and curative,

The physician is seldom called to treat these except during an inflammatory attack which causes considerable pain and annoyance. Should cöexisting diseases, physiological conditions, such as pregnancy, or objections on the part of the patient, prevent us from adopting means for a radical cure, then palliative treatment must be tried. We would, if possible, place the patient in a recumbent position, restrict diet, administer laxatives, apply warm fomentations or the ice-bag, or instead of the warm or cold applications use an ointment of belladonna and opium.

If the consent of the patient can be gained, and no contra-indications, I would open freely an inflamed venous sac and turn its contents out. The cutaneous hemorrhoid or tag can be easily and quickly removed with a pair of sharp scissors. The after-treatment in the removal, either of one or the other, would consist in dusting the parts well with iodoform, after having corrected any hemorrhage, and the application of a firm bandage. Rest in the recumbent position for a few days would be insisted upon. One point should not be forgotten in the removal of external piles—viz.: The contraction which may follow in the process of healing. The contraction, and possible formation of stricture, may be avoided by being careful not to remove too much; two-thirds of the tumor being considered sufficient and safe.

Hemorrhoids, situated within the rectum, have been divided by most writers into three classes. Kelsey describes the venous, capillary, and arterial, which correspond to the venous, nervoid, and collumnar of Ball. The venous variety of hemorrhoid is devoloped gradually, the first step being the dilatation of the vein, followed by hyperplasia and induration of the surrounding tissues.

The two terms applied to the second division of internal hemorrhoids—viz.: Capilliary and nervoid, indicate the structure and appearance. On account of the redness and capillary or granular appearance of the mucous membrane, they have been likened to a strawberry.

This variety of tumor is unlike the other two in that it does not protrude through the sphincter muscle, except when there are cöexisting diseases. From this fact the pain which is felt in prolapsus of the other varieties is notably absent in the nevoid.

Were it not for hemorrhage, which is usually frequent, especially during defication, this variety of internal hemorrhoids would seldom be suspected by the patient.

In the third division of internal piles—viz.: The arterial, Kelsey tells us that the capillaries disappear and that there is a free anastomosis existing between the arteries and veins which are bound together by connective tissue. In the arteries and veins thus bound together there may be dilatations of considerable size. This variety is subject to prolapsus and inflammation like the venous.

Having mentioned the causes, location and varieties of hemorrhoids, what are the symptoms by which they can be recognized?

As we have said before, the patient is usually led to suspect piles by a greater or less amount of blood being discharged during defecation. This is one of the earliest, most prominent and constant symptoms, still it is not pathogenic from the fact that we may have hemorrhage from the intestinal tract, above the rectum. Blood discharged into the alimentary tract above the third division of the large intestine will be more thoroughly mixed with the fæces, and of a darker color.

While pain is a prominent symptom where prolapsus occurs, it does not, as a rule, exist to any marked extent while the pile remains within the bowel. There is only a sensation of uneasiness felt after defecation, as if the bowel had not been thoroughly evacuated. Reflex pains may exist in the back, loins and genital organs.

Prolapsus of the tumors during defecation, especially if there is much straining from constipation. Notwithstanding patients often diagnose this disease for the physician, still it may be difficult for the physician to find the tumor on examination. If the pile is already prolapsed, or if this can be done by voluntary straining after the rectum has been washed out, the patient's diagnosis is easily confirmed, but the tumor is not always found protruding through the sphincter muscle, neither can it be made to pass through it. Under such circumstances the sphincter should be dilated and thorough search made for the pile.

The pain, when the tumor has been for some time within the firm grasp of the sphincter, with the swelling, the dark color,

and the gangrene which may follow, is well known to every practitioner.

The treatment in any case may be either palliative or curative. Frequently it is not optional which of these we will adopt. The patient may object to the means proposed, the condition of the patient may contra-indicate an operation; and, again, the palliative course may offer a fair chance of effecting a cure. We may cite a few conditions which govern us in adopting one or the other plan of treatment. Pregnant women should not be subjected to any except palliative treatment, save in those cases where the free and constant hemorrhage is likely to render the patient anæmic. When the excessive loss of blood produces constitutional effects it may be advisable to operate for the radical cure. The majority of patients who develop piles during pregnancy obtain relief after confinement without any special treatment more than the regulation of the bowels. Grave visceral diseases, especially of the kidneys, are mentioned by most authors as contra-indications to surgical treatment. Instances are cited in which ascites quickly develope where the hemorrhage of piles was arrested, the piles being associated with cirrhosis of the liver.

In the event the consent of the patient is not gained, or the the condition of the patient indicates palliative treatment, we would, if constipation existed, attempt to relieve this by the administration of a laxative, and the use of an enema if necessary. After each action, or oftener if the hemorrhoids are prolapsed, cold water should be used freely. By this we would hope to aid in contracting the distended blood-vessels. Light diet should be taken, and such selected as will leave the least residue to pass over the diseased bowel. Ointments which contain belladonna, opium and tannic acid may be beneficially used. It has been suggested that the daily evacuation be secured just before retiring for the night. The indications to be met are the removal of obstruction to the venous current and permanent contraction of the distended vessels.

The plans for the radical cure are so numerous time will not permit us to go into the details of each, therefore, we will simply mention them, paying most attention to those usually adopted.

Chemical caustics we would mention as useful, especially in

the variety of internal piles, known as the capilliary or nevoid. The prominent symptom in this tumor (if we may call it a tumor) is the hemorrhage. This can often be relieved by one or two applications of nitric acid. Carbolic acid is sometimes used instead of the stronger acids in the treatment of nevoid pile. The danger from hemorrhage, which may occur when sloughing takes place, must not be forgotten.

Gradual dilatation, crushing, the actual cautery, excision, and electrolysis, are and have been used, but not so universally as the injection and ligature.

Before an application or operation for the cure of piles, the bowels should be evacuated and the rectum thoroughly washed out, after which the sphincter muscle must be thoroughly dilated so as to produce temporary paralysis.

While the injection of fluids, of which carbolic acid is the most often used, has not met with favor by all authors, we think it may be due to the fact that due care in injecting it has not been taken. The strength and amount used must be regulated by the character of the tumor and the result desired. If sloughing is desired, strong solutions are to be used; if contraction, the solution should be weak. The larger the tumor the stronger the solution required. Kelsey strongly advocates the use of carbolic acid, uses it in solution from fifteen to fifty per cent. He directs that only one or two tumors be injected at once, and that the needle of the syringe be introduced at the most prominent part of the pile and extend well into the centre, the fluid being forced in gently. The objection which may be made to this treatment is that considerable time is required in the removal of a number of tumors, only one or two being injected at once, deep ulceration, embolism, peritonitis, and death. The ulceration, embolism, peritonitis, and even death may occur from the most trivial operation for the removal of these tumors, and these as objections to the carbolic acid treatment should have no more weight than when offered as objection to Allingham's treatment by ligation.

The acid when injected properly, and in the strength suitable, acts by producing a slough, or by the irritation it produces; the connective tissue is increased to an extent sufficent to obstruct the blood supply, and, as a result, the tumor gradually decreases in size.

Allingham's operation consists in dissecting the pile from the wall of the bowel, beginning at the lowest point, the dissection being continued near the upper margin when the pedicle is firmly ligated. The same preliminary steps should be attended to as in treatment by the injection plan—viz.: The bowels thoroughly moved, dilatation of the sphincter, etc.

If the tumor is large it may be removed after the ligature is applied, which is supposed to include the artery which furnishes the blood to the tumor. The operation is a good one in that we can assure the patient a certain cure, in so far as the code will allow, with but little danger from hemorrhage, either primary or secondary. The after-treatment consists in keeping the patient quiet, securing an action of the bowels on the third day, and in allowing the patient light diet during the first few days. Should the plans I have suggested fail to relieve my patients, I would send them to a specialist, who has more time and better facilities than the general practitioner to deal with stubborn varieties.

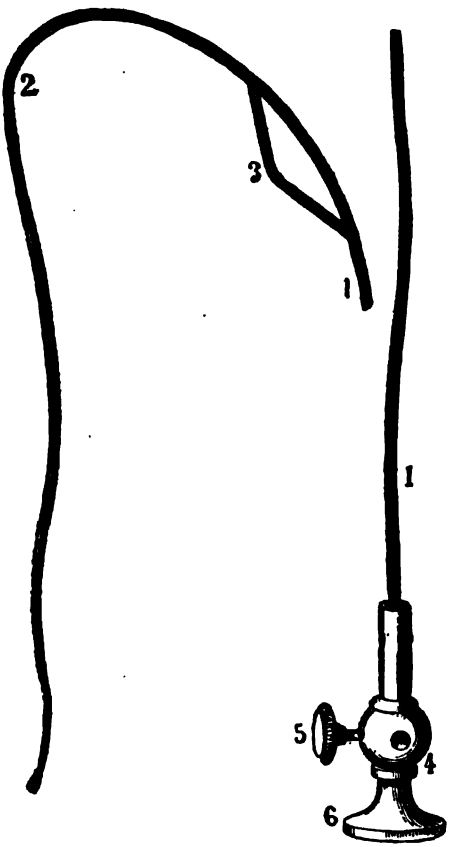
## Selections.

ELECTROLYSIS FOR THE SURGICAL TREATMENT OF STRICTURES.*—It affords me great pleasure to have the honor of being allowed through the kindness of your president to present to you a new instrument which I have devised and called "electrolyser," for the surgical treatment of strictures by the "linear electrolysis" method.

It is a well known fact that electrolysis has been discarded on account of the imperfect instruments which were used. My electrolyser has all the advantages of the urethrotome and none of its inconveniences. It looks like a small whip of which the handle contains a metallic wire projecting from the end which connects with the flexible part. This instrument, being first introduced into the urethra, is connected with the negative pole of a continuous current battery, and the postive pole is connected near the affected part, on the front of the thigh or over the pubes; then the current is turned on.

*Read before the Section in Genito-Urinary Surgery of the New York Academy of Medicine, Tuesday, November 12, 1895.

The operation which is almost painless, requires thirty seconds (on an average), with a current of a strength of at least ten milliamperes, as indicated by means of a galvanometer. The electrolyser remains perfectly cool during the operation. In nearly all cases there is no bleeding, or but very little. The urethra is made aseptic before and after the operation, in order to prevent fever. I never allow a sound to remain permanently in the urethra for any length of time after the operation.




The electrolyser, shown in two parts, on account of its length. 1, 1, the shaft; 2, the conducting portion; 3, the platinum blade; 4, point of connection with the negative pole; 5, screw-head for fixing the conducting cord; 6, ivory push button.

Usually thewound heals quickly without any local treatment whatever, and often the patient can attend to business immediately after the operation.† In nearly all cases I pass a sound the third day after the operation, also the day after. I instruct the patient to pass a sound, No. 22 or No. 24 F., every month and every other month.

With the urethrotome, which cuts blindly, the surgeon can not ascertain the degree of density of the stricture. On the contrary, by means of electrolysis, which merely produces a molecular destruction of the stricture, although the instrument remains cool, I have been able to demonstrate that there are two classes of strictures—"soft and hard." Hard strictures are in the proportion of one against five soft ones.

The time required to perform the operation varies with the density of the stricture Some strictures are so hard that they cannot be successfully operated upon by electrolysis.

If my American colleagues who are familiar with the French language are willing to refer to one of my books entitled *Traitement des retrecissements par l'ectrolysis lineaire* (this book can be procured at the library of the Academy of Medicine), they may find it quite interesting, as it will enable them to understand the improvements which have gradually been introduced in the applications of electrolysis to surgery during the last fifteen years. They will also understand how I have applied electrolysis to the treatment of strictures of the urethra, uterus, rectum, and œsophagus.

Up to date, I have performed in Europe a hundred and thirty-five operations on strictures of the œsophagus (recorded in my book), and with the exception of those which were caused by malignant growths of the wall of the œsophagus all recovered.

It has been my good fortune to meet here some leading surgeons who are authorities in the treatment of strictures, and I am very grateful to them for their kindness in giving me the opportunity to demonstrate the advantages of my method in operating upon some of their patients.—*J. A. Fort, M.D., of Paris, France, in New York Med. Jour. of Nov.* 16, 1895.

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†When the wound does not heal, I merely prescribe injections morning and evening with one part of hydrozone to twenty parts water.

DIAGNOSIS OF INCIPIENT PULMONARY TUBERCULOSIS—Professor Potain, of Paris, in a recent clinical lecture stated that diminution of resonance is always relative, and must be elicted by comparison of the two sides; there are individuals whose supra-spinous fossæ are normally but little resonant. Percussion of the fossæ is a delicate matter. Have the patient sit slightly inclined forwards, with both shoulders on a level and the arms hanging loosely at the sides. Percuss with equal force in both. Diminution of resonance of the apices is sufficient to diagnose tuberculosis, though in most individuals the right is slightly more resonant than the opposite. Yet the contrary may be present with tuberculosis, increased sonority from the presence of bronchitis; a limited area of augmented resonance in the apex is also suspicious. It is generally accompanied by symptoms assisting diagnosis. Auscultation will reveal a weakened and rougher respiration. Feeble respiratory murmur is also a relatively valuable diagnostic sign. In the normal state two kinds of murmurs are produced in the lung—the vesicular and the bronchal—the former predominating, and being the only ones distinctly heard. If the vesicles contain solid material this murmur disappears and only the bronchial one is audible. Hence it is a proof of more or less solidification. Expiration is apparently longer than inspiration. On auscultation the vesicular murmur is interrupted by slight and confused murmurs of bronchial origin. Also respiration may be short and "catchy," from convulsive action of the respiratory muscles. The vocal resonance as well as the thoracic vibrations are increased. Hoarse and sibilant rales are perceived on auscultation, at the beginning; in the vertex these assume a peculiar character. They are heavier, and of a more vibrating sound. Laennec traced them to a softening of the tubercles; this is true, yet they may be perceived from the very beginning. They are due to a bronchitis, and if located in the apex, are tuberculous in nature. The second sound of the heart may also be transmitted through the lung with greater clearness. In short the signs of pulmonary tuberculosis are those of pulmonary condensation and those of bronchitis; their localization in the apex is characteristic of tuberculosis. If the disease has localized itself in some other portion of the lung besides the apex, bacteriological examination of the sputa

will be necessary, though unfortunately, just at the very stage when the diagnosis is liable to be doubtful, the bacilli are apt to be exceptionally present. They are to be found chiefly when the other signs are pronounced and certain.—*N. Y. Med. Times.*

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CARBOLIC ACID POISONING.—Among the accidental poisonings that have been reported those due to the swallowing of carbolic acid by mistake are not infrequent. The taking of carbolic acid with suicidal intent is also an occurrence for which coroners and physicians are occasionally summoned. The microscopic changes of the skin and mucous membranes with which the acid comes directly in contact are familiar to every practitioner; it whitens, corrugates, hardens and anæsthetizes the skin and mucous membranes with which it comes in contact in the more or less concentrated form. It has been observed by competent authorities that a fatty degeneration of the specific parenchyma of the kidneys and liver takes place upon the absorption of the acid into the circulation and its use as an antiseptic is contraindicated in surgical cases where the kidneys are diseased or "vulnerable." Among the more recent reports of pathological changes due to carbolic acid poisoning we find a short article in the January number of the *Brooklyn Medical Journal*, from the pen of Wm. Moser, M.D.:

"In five autopsies of carbolic acid poisoning seen by the author, the gums, tongue, and in fact the whole mouth were colored white. As one would naturally expect, this discoloration affects the whole alimentary tract. The mucosa of the œsophagus in cases under observation was smooth and white, with quite prominent rugæ. In opening the stomach the odor of carbolic acid became quite manifest. The intestines, too, were markedly discolored. The kidneys showed, in one case, principally interstitial changes; in the others the parenchyma of the organ was mainly involved. According to Neumann, Bruckmueller and others fatty degeneration of the cells of the liver and kidneys is a constant pathological accompaniment in poisoning by this acid, changes, then, similar to what occur in phosphorus and arsenical poisoning, The author was unable to confirm this, nor are they confirmed by the observations of Salkowaski. The author dóubts

if there is any lesion peculiar to carbolic acid poisoning. In three of the cases the lungs were congested and edematous. The remaining internal organs presented no lesion which could be ascribed to the acid. Carbolic acid is eliminated in the urine, to which its colored derivatives impart a green, brown or black color. The vomited matter is brownish or greenish by reflected light, and has the odor of the acid. Under the miscroscope, corpora amylacea, fat bodies, small and large epithelial cells, large flat cells, yeast fungi, sarcina ventriculi, a few red and white blood cells, blood crystals and pigment, and in dried specimens fatty needles were seen. But the most striking picture under the miscroscope is the extraordinary large number of muscular fibers. Most of these fibers were normal in appearance, but in a few the tissue was granular and fatty. They were yellowish in color. While a muscular fiber may be seen now and then in vomited material from varied causes, and is not infrequent in poisoning by other acids, yet it is doubtful if in any other condition more fibers, or in fact as many, occur."

The comparatively frequent occurrence of carbolic acid poisoning makes the subject one of much interest to the general practitioner. Luckily in cases of accidental poisoning, which usually occurs among children, only the mouth, tongue, fauces and epiglottis seem to be affected; for the child very promptly tries to rid itself of the burning fluid by violent spitting efforts. There are some cases, however, in which œsophageal strictures as well as severer consequences are the result, and even a lethal exit is an event with which many practitioners become unfortunately sooner or later familiarized. Contributions on this subject are therefore timely, useful and interesting.

As to the therapeutic measures that are to be adopted in carbolic acid poisoning, those mentioned in the standard text-books do not appear to have been improved upon recently.—*Medical Review.*

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ANARCOTINE.—Dr. William Roberts, in the British Medical Jouanal, calls attention to this alkaloid of opium, which he believes has been neglected. The drug, which is generally known as narcotine, having been so named by its discoverer, Derosne,

has been renamed by Palmer because it has been shown to be quite devoid of narcotic properties. Smyrna opium contains one fourth as much of this alkaloid (2 per cent.) as it does of morphine (8 per cent.), while in Bengal opium, which is popularly used in India, it is present in larger quantity (morphine 4, against narcotine 6 per cent.) This drug came into notice in India about fifty years ago, when quinine was very scarce and expensive. The important investigations of Palmer show incontestably that it is scarcely inferior, and in some classes of cases is superior, to quinine as on antiperiodic. From the observations of nearly one thousand cases he concludes that in 70 per cent. the fever was arrested at the second paroxysm after the medicine was administered; in 20 per cent. the arrest was equally sure, but not so quick; and in ten per cent. it did not appear to have any curative effect. When there is an intolerance of quinine it was decidedly more efficacious. Garden, a few years later, believed that it was next in value as an antiperiodic to quinine. The doses range from one to three grains, and it is perfectly insoluble and tasteless. The chloride is very soluble and of an intensely bitter taste.—*Am. Jour. of Med. Sciences.*

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NEATLY TURNED.—A gentleman invited some friends to dinner, and as the colored servant entered the room he accidentally dropped a platter which held a turkey. "My friend," said the gentleman in a most impressive tone, "never in my life have I witnessed an event so fraught with disaster to the various nations of the globe. In this calamity we see the downfall of Turkey, the upsetting of Greece, the destruction of China, and the humiliation of Africa."—*Exchange.*

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SANDER & SONS' Eucalypti Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

DEEP INCISION OF THE PARTURIENT CERVIX FOR RAPID DELIVERY.—J. Clifton Edgar (American Journal of Obstetrics and Diseases of Women and Children, 1885, No. 6) says that four years ago Dührssen advocated rapid delivery in cases of grave danger, by means of from two to six deep incisions of the cervix, reaching to the cervico-vaginal junction, after the supra-vaginal portion had been obliterated either by nature or by the obstetrician. His conclusions were: that after the operation, with not too prolonged though deep anæsthesia, eclamptic attacks cease in 93¾ per cent. of cases; that the prognosis of operations for eclampsia is not graver than the prognosis of gynæcological operations for other diseased conditions; that the danger in eclampsia is increased by the number of the attacks with or without an operation, and death may result after a very few attacks due to cerebral hemorrhage or fat emboli, therefore it is dangerous to wait; that eclampsia occurring in the puerperium has but very slight danger, so, by emptying the uterus, we place the patient in a much more favorable condition. Dührssen's results were brilliant. In thirty-five cases all the mothers were saved and but two children were lost. Charpentier, of Paris, vigorously opposed this method; also others of the French school; but the bulk of literature of the past few years is in favor of the rapid emptying of the uterus. All authorities are agreed that, after dilatation has occurred, immediate evacuation is in order, but they differ widely as to the means of dilating the cervix. The author states that an expectant line of treatment means almost certain loss of the child and one-third of the mothers.

To control the convulsions by chloroform, and to empty the uterus under deep anæsthesia rapidly, are indications generally agreed upon.

Four methods are available for rapidly emptying the uterus; Cæsarean section, mechanical dilatation, deep incisions, and combined mechanical dilatation and deep incisions.

Cæsarean section in this class of cases has a very high mortality. Mechanical dilatation is the popular method, but requires forty to ninety minutes, in some cases, to effect it. Deep cervical incisions require five to ten minutes, and are of great value here, as time is of such importance. The combined

method is advantageous where the supra-vaginal portion of the cervix still persists. In the author's first case here reported, mother and child were saved, and now after one year suffer no inconvenience from the operation. She had eight convulsions before delivery, and none afterward. In the second case the woman was comatose, had anuria when admitted to the hospital, and died sixteen hours after operation. Her child is alive. She had nine convulsions before the operation, and two afterward (slight). She never regained consciousness, and the autopsy showed acute parenchymatous nephritis. In the third case patient had general anasarca and pulmonary œdema. Mother and twins were saved. The combined method was used in this case; the total time of operation, from the commencement of dilatation to the end of the third stage, was twenty-nine minutes.

Dührssen claims that when the incisions are made in four directions, extending completely through the cervical portion fully to the utero-vaginal junction, the original incisions will not extend farther, and that it is only when they are incompletely made that further tearing occurs. Dr. Edgar's experience bears this out, as the one incision which he did not make deep enough tore somewhat into the vaginal wall. The incisions should only be made after the supra-vaginal portion of the os is entirely obliterated. If this has not occurred, it should be previously dilated by instruments or the hand.

The method of incising the cervix is to fix the free edge of the os with forceps or fingers, and cut with long, straight or angular scissors straight up to the utero-vaginal junction. It is not necessary or advisable to suture the incision after the operation, as spontaneous union (partial) usually occurs, as shown in the author's cases. The suture is apt to be an irritant, which may set up further convulsions. Septic infection can and should be avoided by strict surgical cleanliness. Secondary infection is also prevented by antiseptic irrigation of the uterus after delivery and by means of a gauze drain.

The author states in conclusion that the field for the operation is limited, that it is a serious one, and that strict cleanliness and thorough understanding of the mechanism of dilatation are necessary.—*Medicine.*

INDISCRIMINATE EXPECTORATION.—Failing to find a cure for tuberculosis, attention has been directed by the profession, and to some extent by the public, to restrict the disease by cutting off as far as possible all means of communicating it in its pulmonary form from the sick to the well, or to those predisposed.

Dr. William G. Bissell of the Buffalo Department of Health has made some suggestions in the *New York Medical Journal* towards restricting the spread of tuberculosis, by preventing indiscriminate expectoration. To the average American who believes in freedom in the widest sense of the term the restriction of his innate right to "spit" may seem a hardship, but little by little the public is becoming convinced that the spread of the tubercle bacillus, by careless and often unnecessary expectoration in public places, is one important factor in helping to disseminate consumption.

The most common way of spreading pulmonary consumption is by means of dried sputum. This is denied by few. The street car companies in many cities, and among them Buffalo and Baltimore, have been prevailed upon to place notices, to the effect that "spitting on the floor of the car is positively prohibited." This is a rule, but without the proper legislation to back it, it can be broken with impunity. During the year 1894, over forty million passengers were carried by the Buffalo street railways, and during 1895 in Baltimore about a million persons a week used the cars. It is easy to conceive of a convalescent riding in the cars, especially in cold, wet weather, when the doors and windows are kept closed, and thus exposing himself to a possible contagion from dried sputum containing tubercle bacilli.

Dr. Bissell has examined the dust from the cars of Buffalo, and the same might be done in the cars of any other large city, and he has succeeded in demonstrating tubercle bacilli in many cases. His conclusions are that much good can be done, and disease prevented by educating the public in general as to the danger of indiscriminate and careless expectoration, and by the passing of a city ordinance, prohibiting the expectoration on the floors of cars, in public buildings and similar places. Without these two preliminaries nothing can be done to prevent the dis-

ease. The health commissioner of that city sent to each physician a circular letter requesting a report of cases of pulmonary consumption to be sent to the health office, and in case of doubt to submit a specimen of the sputum of the suspected patient to the bacteriologist of the department, who without cost to the physician or patient will report the result of the examination to the physician and a circular of inspection prepared by the health department is sent to the family in which cases of tuberculosis occur.

Effective legislation is what is apparently needed in Buffalo and what is needed in many other places, and it was with just such ideas as these that the *Maryland Medical Journal* has sent out a series of questions to about nine hundred physicians in Baltimore, with the idea of obtaining some legislation which shall not be galling to the sick, and shall at the same time have some consideration for the well or the delicate ones predisposed to this terrible scourge. The answers to these questions have not come in as one would have the right to expect. Through apathy, indifference, carelessness, forgetfulness, attention to personal interests only, many of the physicians whose opinions are desired have failed to notice the questions, although the answering of them demands little trouble and less time.

It is proposed to seek legislation from the State, and meanwhile it is again asked that every physician, whether he be in favor or opposed to any move which will tend to restrict tuberculosis in any form, to reply to these questions sent out and put the State of Maryland and the city of Baltimore on an equal footing with other progressive States and cities which are doing philanthropic work in preventive medicine.—*Maryland Medical Journal.*

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How to Walk Upstairs.—"There are but very few persons who know how to walk upstairs properly," says a well known physician. "Usually a person will tread on the ball of his foot in taking each step, springing himself up to the next step. This is very timesome on the muscles, as it throws the entire suspended weight of the body on the muscles of the legs and feet. You should, in walking or climbing stairs, seek for

the most equal distribution of the body's weight possible. In walking upstairs your feet should be placed squarely down on the step, heel and all, and then the work should be performed slowly and deliberately. In this way there is no strain upon any particular muscle, but each one is doing its duty in a natural manner. The man who goes upstairs with a springing step you may be sure is no philosopher, or, at least, his reasoning has not been directed to that subject."—*Scientific American.*

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A PARROT YARN.—A man whose niece had coaxed him to buy her a parrot succeeded in getting a bird that was warranted a good talker. He brought it home, and after putting it in a cage stood before it and said, "Say uncle, Polly." The bird did not respond, and after repeating the sentence a dozen times or more with no better success the uncle put his hand into the cage, and grabbing the bird by the neck, shook him until his head wabbled around, all the time yelling to him, "Say uncle, goll darn you, say uncle!" The bird looked limp and lifeless; and, disgusted with his purchase, the old fellow took the parrot into the yard where he had a coop of thirty chickens. Thrusting the half-dead bird in with the chickens, he exclaimed, "There, by gosh! you'll say uncle before you get out!" Next morning the uncle went to see how the parrot was getting on. Looking into the coop, he counted twenty-nine dead chickens, and in the centre of the coop stood the parrot on one foot, holding the thirtieth chicken by the neck and shaking it till its head wabbled, and screaming, "Say uncle, goll darn you, say uncle!" —*New Bedford Standard.*

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GOOD LEMONADE, says an experienced writer, is one of the most perfect drinks ever devised. I can hardly understand why it is not in daily use in place of tea or coffee, and why it does not drive out every kind of alcoholic drink. Perfect lemonade is made as follows: For a quart, take the juice of three lemons, using the rind of one of them. Carefully peel the rind very thin, getting just the yellow outside; cut this into pieces and put with the juice and powdered sugar, of which use two ounces to

the quart, in a jug or jar with a cover. When the water is just at the boiling point, pour it over the lemon and sugar, cover at once, and let it get cold. Try this way once and see if it is not delicious.—*Popular Health Magazine.*

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

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STENOSIS OF PYLORUS.—The *Gaz. degli Osp. e Clin.* reports an operation of gastro-enterostomy for severe cicatrixial stenosis of the pylorus at Vetralla, last March. The case required a large opening. Cat-gut and silk were both used. In fifteen days after operation, patient (a laboring man, age 45) was eating the richest diet the hospital afforded without inconvenience, and when he left, sixty days after operation, he was entirely restored to his normal health and had gained many pounds in weight. He resumed his ordinary work and has remained since in robust health. De Mattoli was the surgeon in charge of the case.—*Jour. Am. Medical Association.*

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GREEN URINE DUE TO INDIGO.—Dr. Archibald Garrod showed before the Clinical Society of London, a specimen of urine from a child who had sucked a piece of carpet colored with indigo. The green coloration was due to the combination of the yellow tint of the urine with the blue of indigo. On passing the urine through the filtering paper it lost much of its green tint, whilst the paper was stained blue. The indigo was, therefore, in suspension. Some years ago, a favorite treatment for epilepsy was indigo to the extent of six drachms a day. Those patients had green alkaline urine.—*Brit. Med. Jour.*

Uterine Inertia.—A query recently propounded to the *Medical Age* recalls a circumstance happening some fifty years ago in Scotland, and recorded in the *Medical Gazette*.

A farmer in the neighborhood of Edinburgh, son of an eminent surgeon of that city, frequently had cows in great distress during accouchement, and now and then, perhaps, like other farmers, lost a cow in the act of parturition. On one occasion, when a poor animal of considerable value had been suffering for a very long time, and there was every prospect of an unfavorable issue, and it seemed inevitable the creature must die undelivered, the owner hurried into Edinburgh and took counsel with the eminent veterinary professor, Mr. Dick. At the suggestion of the latter, with all expedition possible six or eight quarts of tepid water were thrown into the animal's uterus, the hind quarters being previously elevated so as to prevent a retnrn of the fluid. The liquor amnii had completely escaped at the early stage of labor, and it was twenty-six hours after this event when Prof. Dick's ingenious device was applied; and by this means it was found by external palpation that the calf was once more floating freely in the womb cavity. The animal, however, was so completely exhausted there seemed no hopes of the calf being expelled by natural efforts; nevertheless, a few minutes after injection, a vigorous pain came on and a live calf was delivered; the cow sustained no other ill consequences than a few days' weakness, the natural effects of previous suffering.

Commenting upon this fact the *Medical Gazette* added: "A neighboring surgical accoucheur in large practice was so much struck with the simplicity and apparenty safety of the operation, that he subsequenty adopted it, with unqualified success." In one instance it supplied a need that avoided the use of long forceps. On a second occasion, but for the water injection, turning and forcible delivery would have been indispensable to the saving of the patient's life. In many other cases by the injection of a quart of tepid water the patients were delivered of living children without any unfavorable symptoms ensuing.

It is remarkable this procedure has not obtained more general recognition, since its value does not admit of a shadow of doubt; and with modern aseptic measures there is no reason whatever why it should not become a general procedure, thus obviating

long suffering, often the need for forceps, preventing further exhaustion to the patient, and avoiding the accidents that are of too frequent occurrence resulting in torn and lacerated perineums.—*Med. Age.*

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THE TREATMENT OF SWELLED TESTICLE.—In the third volume of Dennis and Billing's new "System of Surgery" Dr. J. William White and Dr. William H. Furness, 3d, the authors of the section on the Surgery of the Genito-urniary System, remarked that a patient in whom epididymitis is developing should be put in bed at once, with the scrotum elevated on a pad of cotton. Free movements of the bowels should be kept up, and the diet restricted to the very lightest food. If there is any fever, it is well to give a drop of tincture of aconite and five grains of potassium bromide every two or three hours. The affected testicle should be wrapped in lint and kept constantly moistened either with lead-water and laudanum or with the following lotion:

| | |
|---|---|
| Tincture of aconite | |
| Tincture of opium, each | 1 fl oz.; |
| Diluted lead-water | |
| Water, each | 2 fl oz. |

Cold compresses (not iced) are often very soothing, but rest is the chief curative measure during the acute stage.—*N. Y. Med. Journal.*

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TRANSMISSION OF SCARLET FEVER.—A child visiting away from home was taken ill with scarlet fever; the friends remarking that the desquamation was like the casting of a snake, wrote a description and enclosed three pieces for the parents. Six and a half days after receipt of the letter, a baby brother of the first child, living at home, took the disease.

The only other case of transmission of contagion by letter yet reported was published by Sanné. Two persons received a note from a convalescent from scarlet fever, who wrote she was desquamating so freely that she had to brush the fine scales off the note-paper on which she wrote. Some days later both recipients became ill with the disease. Physicians should warn patients against such dangerous errors.—*Arch. of Pediatrics.*

THE SAMUEL D. GROSS PRIZE.—The Second Quinquennial Prize of one thousand dollars, under the will of the late Samuel D. Gross, M.D., will be awarded January 1, 1900. The conditions annexed by the testator are that the prize "Shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in surgical pathology or surgical practice, founded upon original investigations, the candidates for the prize to be American citizens.

It is expressly stipulated that the successful competitor, who receives the prize, shall publish his essay in book form and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery.

The essays, which must be written by a single author in the English language, should be sent to Dr. J. Ewing Mears, 1429 Walnut St., Philadelphia, before January 1, 1900.

Each essay must be distinguished by a motto, and accompanied by a sealed envelop bearing the same motto, and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year.

The committee reserves the right to make no award if the essays submitted are not considered worthy of the prize.

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WARM BATH FOR INSOMNIA.—According to Dr. Eccles the use of the warm bath for the purpose of producing sleep is very efficient if properly carried out. The bath should be administered in a room whose temperature is 65° to 70° F. The patient is made to stand with his head over the edge of the tub, and his head and face are then rapidly douched with water at 100° F. The cooling of the body by the air and the hot sponging of the head sends the blood to the head, dilating the vessels of the entire brain. The entire body is then immersed, except, of course, the head, in a bath at 98° F, which is rapidly raised to a temperature of 105° to 110° F. In a few minutes the patient is taken from the bath, wrapped in warm flannels, and, without exertion on his part, taken to his room. The blankets absord

the moisture; in his room the night clothes are put on, a warm bottle placed at his feet, and possibly some warm, liquid food administered. The sedative and refreshing result is most marked.—*Med.-Surg. Bulletin.*

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THE CHLORIDE OF GOLD AND SODIUM in small doses (1-20 gr.) three times a day will relieve dyspepsia. A red and glazed tongue, epigastric pain, increased by taking food, and a tendency to relaxation of the bowels after eating, are indications for the use of this salt.—*Bartholow.* Mercauro is even a much more reliable form of gold for dyspepsia.—*Med. Sentinel.*

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# Poetry.

## A FEVER DREAM DURING THE PERIOD WHEN WATER WAS WITHHELD FROM THE PATIENT.

BY T. F. LOCKWOOD, M.D., OF BUTLER, MO.

A fever—scorched my body, fired my brain!
Like lava, in Vesuvius, boiled my blood,
Within the glowing caverns of my heart.
I raged with thirst, and begged a clear cold draught,
Of fountain's water. 'Twas with tears denied.
I drank a nauseous febrifuge, and slept;
But rested not—harassed with horrid dreams,
Of burning deserts, and of dusty plains,
Mountains disgorging flames, forests on fire,
Steam, sunshine, and boiling lakes—
Hills of hot sand, and glowing stones, that seemed
Embers and ashes of a burnt up world!
Thirst raged within me—I sought the deepest vale,
And called on all the rocks and caves for water;
I climbed a mountain. and from cliff to cliff,
Pursued a flying cloud, howling for a draught;
I crushed the withered herbs and gnawed dry roots,
Still crying: water! water!—while the cliffs and caves,
In horrid mockery, re-echoed "Water!"
Below the mountain, gleamed a city, red

With solar flames, upon the sandy bank
Of a broad river—"Soon, oh soon!" I cried,
"I'll cool my burning body in that flood,
And quaff my fill," I ran, I reach the shore—
The river was dried up. Its very bed
Was dust; and on its arid rocks I saw,
The scaly myriads fry beneath the sun!
Where sunk the channel deepest, I beheld
A stirring multitude of human forms,
And heard a faint, wild, lamentable wail.
Thither I sped, and joined the general cry
Of "water!" They had delved a spacious pit,
In search of hidden fountains—sad, sad sight!
I saw them rend the rocks up in their rage,
With mad impatience, calling on the earth,
To open and yield up her cooling fountains.
Meanwhile the skies, on which they dared not gaze,
Stood o'er them like a canopy of brass—
Undimmed by moisture. The red dog-star raged,
And Phœbus, from the house of Virgo, shot
His scorching shafts. The thirsty multitude
Grew still more frantic. Those who dug the earth,
Fell lifeless on the rocks they strained to upheave,
And filled again, with their own carcasses,
The pits they made—undoing their own work!
Despair, at length, drove out the laborers,
At sight of whom a general groan announced,
The death of hope. Ah! now, no more was heard,
The cry of "water." To the city next,
Howling, we ran, all hurrying without aim;
Thence to the woods. The baked plain gaped for moisture,
And from its arid breast heaved smoke, that seemed
The breath of a furnace—fierce, volcanic fire,
Or hot monsoon, that raises Syrian sands
To clouds. Amid the forests, we espied
A faint and bleating herd. Suddenly a shrill,
And horrid shout arose of "blood! blood! blood!"
We fell upon them with the tiger's thirst,
And drank up all the blood that was not human.
We were dyed in blood; despair returned;
The cry of blood was hushed, and dumb confusion reigned.
Even then, when hope was dead—past hope,
I heard a laugh, and saw a wretched man,
Rip his own veins, and bleeding, drink
With eager joy. The example seized on all;
Each fell upon himself, tearing his veins

Fiercely, in search of blood. And some of them were,
Who, having emptied their own veins, did seize,
Upon their neighbor's arms, and slew them for their blood.
Oh! happy then, were mothers who gave suck,
They dashed their little infants from their breast,
And their shrunken bosoms tortured, to extract,
The balmy juice, oh! exquisitely sweet
To their parched tongues. 'Tis done, now all is gone!
Blood, water, and the bosom's nectar, all.
"Rend, oh! ye lightning, the sealed firmaments,
And flood a burning world. Rain! rain! pour! pour!
Open, ye windows of high heavens, and pour
The mighty deluge! Let us drown, and drink
Luxurious death! Ye earthquakes! split the globe,
The solid, rock-ribbed globe, and lay all bare
Its subterranean rivers and fresh seas."
Thus raged the multitude, and many fell
In fierce convulsions; many slew themselves,
And now, I saw the city all in flames,
The forest burning, and the very earth on fire.
I saw the mountains open with a roar,
Loud as the seven Apocalyptic thunders,
And seas of lava rolling headlong down,
Through crackling forest, fierce and hot as hell,
Down to the plain I turned to fly, ——and waked!

# Editorial.

## OUR CENTENNIAL—POSSIBLE POSTPONEMENT.

Since our January No. was issued the Board of Directors having considered the matter thoroughly and well, and by reason of many valid and inevitable considerations that would materially affect this important enterprise during the current year, conditions that would pass away with the year, have with remarkably unanimity recommended that instead of opening the grandest exposition on this continent, excepting the Great White City that stood on the lake, it would be better to wait a little longer, and then begin under more auspicious circumstances Tennessee's great display of her remarkable resources, fecundity, fertility, and magnificent, yes, we say boundless wealth, when the "flowers bloom in the spring."

At first there was some opposition to this idea, but with consideration, counsel, advice, with careful study and deep thought, this gradually

A Vitalizing Tonic to the Reproductive System.

# SANMETTO

—FOR—

## GENITO-URINARY DISEASES.

☞A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

SPECIALLY VALUABLE IN

Prostatic Troubles of Old Men--Pre-Senility,
Difficult Micturition--Urethral Inflammation,
Ovarian Pains--Irritable Bladder.

**POSITIVE MERIT AS A REBUILDER.**

DOSE:—One teaspoonful four times a day.

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BISHOP McTYIERE, while President of Vanderbilt University, who never gave an opinion without careful thought, said to a mother, whose son wanted a position: "Send him to Jennings' Business College; a certificate from R. W. Jennings to your son, recommending him for a position, will be of more benefit to him than any other influence he could have."

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A practical school of established reputation. Business men recommend this College. Write for free Catalogue.

Address R. W. JENNINGS, PRINCIPAL.

# MELLIN'S FOOD

## For Infants and Invalids.

**A Soluble Dry Extract of Barley Malt and Wheat prepared after the formula of the eminent chemist, Baron Justus von Liebig, for the**

## MODIFICATION OF FRESH COW'S MILK.

**MELLIN'S FOOD is entirely free from Starch; the Carbohydrates contained therein are Dextrins and Maltose.**

"The sugar formed by the action of the Ptyalin of the Saliva and the Amylopsin of the Pancreas upon starch is MALTOSE. In the digestive tract MALTOSE is absorbed UNCHANGED."
*Textbook of Human Physiology, Landois and Sterling.*

"MALTOSE constitutes the end product of the action of diastase, and amylolytic ferments generally, on starch and its congeners."
*Physiology of the Carbohydrates, F. W. Pavy, M.D., LL.D., F.R.S.*

**MELLIN'S FOOD, prepared with FRESH COW'S MILK according to the directions, is a true LIEBIG'S FOOD, and the BEST SUBSTITUTE for Mother's Milk yet produced.**

THE DOLIBER-GOODALE CO., BOSTON, MASS.


### The Treatment of Influenza or La Grippe.

It is quite refreshing these days to read of a clearly defined treatment for the grip. But in an article in the *Lancet-Clinic*, December 28th, 1895, Dr. James Hervey Bell, 251 East 32d Street, New York City, says he is convinced that too much medication is both unnecessary and injurious. He has few remedies; prescribes them with confidence; and "trusts the rest to nature."

When called to a case of influenza, the patient is usually seen when the fever is present, as the chill, which occasionally ushers in the disease, has generally passed away. Dr. Bell says he then orders that the bowels be opened freely by some saline draught, as hunyadi water or effervescing citrate of magnesia.

For the high fever, severe headache, pain, and general soreness, the following is ordered:

℞ Antikamnia Tablets (5 gr. each), No. xxx.
Sig. One tablet every two hours.

If the pain is extremely severe, the dose is doubled until relief is obtained. Often this single dose of ten grains of antikamnia is followed with almost complete relief from the suffering. Antikamnia is preferred to the hypodermic use of morphia because it leaves no bad after-effects; and also because it has such marked power to control pain and reduce fever. The author says that unless the attack is a very severe one, the above treatment is sufficient.

After the fever has subsided, the pain, muscular soreness and nervousness generally continue for some time. To relieve these and to meet the indication for a tonic, the following is prescribed:

℞ Antikamnia & Quinine Tablets, No. xxx.
Sig. One tablet three times a day.

This tablet contains two and one-half grains of each of the drugs, and answers every purpose until health is restored.

Occasionally the muscular soreness is the most prominent symptom. In such cases the following combination is preferred to antikamnia alone:

℞ Antikamnia & Salol Tablets, No. xxx.
Sig. One tablet every two hours.

This tablet contains two and one-half grains of each drug.

Then again it occurs that the most prominent symptom is an irritative cough. A useful prescription for this is one-fourth of a grain sulphate codeine and four and three-fourths grains antikamnia. Thus:

℞ Antikamnia & Codeine Tablets, No. xxx.
Sig. One tablet every four hours.

Dr. Bell also says that in antikamnia alone we have a remedy sufficient for the treatment of nearly every case, but occasionally one of its combinations meets special conditions. He always instructs patients to crush tablets before taking.

melted away, and at the recent meeting of a full board it was so decided by the Board of Directors; and a meeting of the Stockholders, who alone have so important a question under their control, is called for the 7th day of February, and the question then will be deffinitely settled.

We have not time or space to enter into a discussion of the question of postponement, nor even present a synopsis of the reasons that have been presented; that is a matter for the Stockholders to decide, and they will be duly informed and well qualified to do so when the day arrives.

However, this question has produced no lessening of interest taken in this grand enterprise by every man, woman and child in our midst; nor has it caused the slightest cessation of activity on the part of those in whose hands have been placed its working details.

Appearance out at the grounds are more lively now than they were last month, and between three and four hundred men are at work there now. It is surprising how much such a force can accomplish in a very short period, and now the many huge buildings which are under construction inpress one with the idea that a young city is being built.

The scene, in which carpenters with their hammers and saws, laborers with their teams, plows, picks and shovels, are the actors, with the incipient Centennial perspective as a background, is a very interesting one, and now that six buildings are practically under construction there is considerably more to attract one's attention out at West Side Park than most any place in the city.

The most notable progress on the buildings is that which marks the work on Machinery Hall. The studding and sleepers have been set, and it is growing rapidly. This will be a gigantic structure and one of the prettiest at the Centennial.

The Parthenon is another building which is going rapidly up. However, the exterior walls are yet scarcely a third as high as they will be. The structure is to be forty-eight feet high, and when completed will be to the mind of all who view its attractions, in all their grandeur, "a thing of beauty and a joy forever."

Yes, the work is going bravely on, and we will have a Centennial, an Exposition, at some good day; and of its progress we will, from time to time, keep our readers as well advised as our humble efforts will allow. More anon.

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## SEWANEE MEDICAL COLLEGE.

The Catalogue and Announcement for 1896 of this young and progressive Medical Department of the University of the South, located at Sewanee, Tenn., on the top of the Cumberland Mountain Plateau, has just been received. It was printed by the University Press at Sewanee, and is a very perfect and handsome specimen of mechanical art, well in keeping with the most populous centers of the land. Excellent paper, clean type, and good ink, its pages are remarkably clear and free from

blurs or blotches, and the illustrations are expressive and gems of art.

We make the following extract from its pages, but if you are in any way interested in obtaining medical instruction for yourself or others, write to the Dean, Dr. J. S. Cain, of the city, or at Sewanee for a copy:

"The Sewanee Medical College will precede its fifth annual course of lectures by a preliminary term of six weeks, commencing on Thursday, May 21, 1896, which will be devoted exclusively to Fundamental, Laboratory, and Clinical work, and which will be free to all medical students.

The regular course of lectures will commence on Thursday, July 2, 1896, and continue six months. The sessions or courses of Medical Lectures of our School must of necessity be co-ordinate with the other departments of the University. In these the vacation between terms occurs during January, February, and March, hence it is impossible to include these months wholly in our Medical Course, as is the usual custom with medical colleges.

We feel and know from observation that the seasons of the year in which our sessions are taught, and the exceptional facilities and advantages possessed by our favorably situated institution, offer peculiar inducements to students in search of medical knowledge. To students entering their Junior Year, our thorough facilities and methods of teaching the fundamental branches and of imparting those indispensable subjects, too often neglected in the Medical Course, render our School of peculiar advantage to the young student just entering upon the study of medicine.

To those who have already received two courses of lectures, and are otherwise eligible, we offer facilities for completing their studies and receiving a degree several months in advance of those who wait for winter schools; they thus save valuable time, and often procure eligible situations in advance of the spring output of the winter colleges.

After an experiment during the past year, in a ten months' term of equal duration with the other departments of the University, it has been determined by the Medical Faculty and University authorities to return to the former plan upon which the Medical Department was originally organized and conducted, thus placing the School upon the same basis and strictly in harmony with the Southern College Association."

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## UNIVERSITY OF TENNESSEE RECEIVES THE HIGHEST AWARD AT ATLANTA.

The University of Tennessee at Knoxville won the highest award, a gold medal, at the Cotton States and International Exposition at Atlanta for the best collective exhibit of university work. President Charles W. Dabney, Jr., of the university must have felt highly elated and reasonably gratified when he received notice from the management of the exposition, and we know that the good citizens of the State of Tennessee, and all the alumni of the university will be no less delighted at the decision of the Committee on Awards in this department.

The exhibit was a handsome and very extensive one. It was prepared with the idea of illustrating first, the history of the university, and second, the workings of the institution at present. Owing to limited space, only a few specimens from each of the departments were shown, but they represented in a fitting manner the work done by the students. The present working of the institution was shown by specimens from the drawing department, the department of mechanic arts and the laboratories of botany, zoology, chemistry and physics. Everything in the exhibit, with the exception of the photographs, the collection of mushrooms, the printed books and the furniture, was the work of members of the university, for the most part students. This exhibit will be placed in Old College, at the university, from now until after commencement, June next. It is the intention of the university authorities to reproduce the exhibit, upon a much enlarged and improved plan, at the Tennessee Centennial.

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DONT'S FOR CONSUMPTIVES, OR THE SCIENTIFC MANAGEMENT OF PULMONARY TUBERCULOSIS, is the title of a book which, under the authorship of Dr. Charles Wilson Ingraham, will soon (about Feb. 10th) be issued by the Medical Reporter Publishing Co. of Rochester, N. Y.

The complete work of 35 chapters is devoted exclusively to the general management of pulmonary invalids, no reference whatever being made to drug treatments.

The object of the author is to supply the physician with a practical work, and at the same time, by eliminating technical terms, reduce the text within the easy comprehension of the intelligent patient. The author claims that "a good understanding of his condition is the best remedy for the consumptive." With this book in the hands of his patient, the physician will be relieved of a multitude of details which attach to the successful management of such cases. Special attention has been given those chapters pertaining to the destruction of tubercular infection.

This book will be printed on 72-pound pound antique book paper, bound in cloth (imitation morocco), with title in gold leaf. Price, $1.75.

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PROFESSIONAL OPINIONS OF INGLUVIN.—Edward Warren (Bey) M.D., C.M.—"Hereafter I shall prescribe 'Ingluvin' liberally and with great confidence in its therapeutic value."

CHAS. LOW, M.R.C.S. E., etc.—"Medical men will never regret using 'Ingluvin'."

EDWARD COTTEN, D.N., C.P.P., London—"'Ingluvin' is particularly efficacious in vomiting produced by pregnancy."

WALDO BRIGGS, M.D.—"I have used 'Ingluvin' extensively and find it far superior to any remedies for Vomiting of Pregnancy, Dyspepsia and Indigestion."

CONGESTION OF THE KIDNEYS WITH SCALDING URINE AND INFLAMMATION OF THE URETHRA.—I ordered a bottle of Sanmetto for my own use. I had been suffering from congestion of the kidneys with scalding urine and inflammation of the urethra for a long time. All I did failed to give me any relief. I decided to try Sanmetto. The first bottle gave me such relief that I ordered another one from my druggist and used about one-half of it. I consider that I am a well man in that respect for the first time in ten years. I am confident that Sanmetto did the work, and of course I am highly pleased with it. Will continue to use it whenever an opportunity presents itself. E. HULL SMITH, M.D.
Waynemanville, Ga.

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BROMIDIA.—Having recently had the care of two critical cases of acute alcoholism, in which insomnia was so important a feature as to very materially threaten life, after having resorted ineffectually to other soporifics, even those of dangerous tendencies, I finally tried Battle's Bromidia with the most happy effect. In one of the cases the stomach was rejecting everything, and the Bromidia was used per enema. In both, the effect was marked by long and refreshing sleep, and the following day found both in need of but little more medication; and good diet, of which I had now no difficulty of administering soon brought a hard fought battle to a satisfactory close—the crowning means of success being *Battle's*.—ED. S. P.

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A CARD.—We have frequently received communications from physicians asking us to give the digestive powers of Seng in numerals.

As Seng is not an artificial digestant, but a digestive secernent, this is, of course, impossible.

We therefore desire to correct this erroneous impression with the statement that Seng, through its secernent action, encourages the flow of nature's own pepsin when taken into the stomach, and thus does not dissolve the food *per se*.

The physiological difference between the pepsin and seng treatment is that the former is an artificial treatment, and a makeshift at best, whilst the latter is a restorer of the natural functions of digestion.

SULTAN DRUG CO.

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SENNINE, THE NEW AMERICAN ANTISEPTIC.—This product is composed of Boracic Acid and Phenol, and is unexcelled as a dry Antiseptic Dressing. The only perfect substitute for Iodoform, Carbolic Acid, Bichloride of Mercury, etc. It is entirely odorless, consequently preferable, and is very highly recommended by the most prominent surgeons.

P. BLAKISTON, SON & Co., of Philadelphia, announce a book on "Appendicitis," by John B. Deaver, M.D., Assistant Professor of Applied Anatomy, University of Pennsylvania; Assistant Surgeon to the German Hospital, etc. The book will be arranged in a practical and systematic manner. The history, etiology, symptoms, diagnosis, operative treatment, prognosis, and complications of this disease will be given in the order named. It will contain about forty illustrations of methods of procedure in operating and typical pathological conditions of the appendix, the latter being printed in colors.

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IN THE advertisement in this issue of Theodore Metcalf Co., of Boston, there will be found an offer that is exceedingly liberal, and one our readers should avail themselves of. It is not often that $15 is exchanged for $5.

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# Reviews and Book Notices.

THE PRINCIPLES AND PRACTICE OF MEDICINE. Designed for the use of Practitioners and Students of Medicine. By WILLIAM OSLER, M.D., Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University, and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore; Formerly Professor of the Institutes of Medicine, McGill University, Montreal; and Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia. Second edition. New York: D. APPLETON & Co. 1895. 8vo., pp. 1143. Price, cloth, $5.50; sheep, $6.50; half morocco, $7.00.

Some wretched thief, with an appreciation of good medical literature quite in keeping with the most correct principles, purloined the handsome copy of this work before it had been in our possession more than half a day. The somewhat hurried inspection we were enabled to give it justifies us in reproducing the following from *The N. Y. Medical Journal* of December 14th; furthermore, we do not have any hesitation in subscribing to anything that Bro. Foster has to say about books.

"The second edition of this work differs from the first in many respects. These differences, to quote from the preface, are as follows: 'In Section I the article on typhoid fever has been thoroughly revised to date, and that on malarial fever in

large part rewritten. The subject of diphtheria has been completely recast, and extended from eleven to twenty pages. The article on septicæmia and pyæmia has been rearranged and largely rewritten. Short descriptions of the bubonic plague and of the foot and mouth disease have been added. New matter will also be found in connection with cholera, syphillis, tuberculosis, and others of the infectious diseases. In this section, in describing the stage of incubation, the report of the Clinical Society of London has been adopted.

'In Section II the articles on gout and diabetes have been extended. A description of infantile scurvy and of the hemorrhagic diseases of the newborn has been added.

'In Section III there has been added an account of eczema of the tongue and of leukoplakia, and under chronic tonsillitis will be found additional details regarding the injurious effects of mouth breathing. The methods of clinical examination of the stomach have been omitted, since they more correctly belong to, and are more fully given in, manuals of diagnosis. The subject of appendicitis has been completely rewritten and much extended. A new section has been added on affections of the mesentery, and under diseases of the liver a description of the dislocations and deformities of the organ. Under localized peritonitis a new section will be found on the subphrenic variety.

'In Section IV and V many minor additions and corrections have been made. In writing on angina pectoris, it was a pleasure to be able to give the credit of the 'intermittent claudication' theory to that distinguished old Glasgow professor, Allan Burns.

'In Section VI the subjects of anæmia and leukæmia have been revised and rearranged. In the articles on Addison's disease and on exophthalmic goitre and myxœdema will be found references to the new investigations.

'In Section VII a brief account of anuria has been added, and a number of minor corrections and additions have been made.

'In diseases of the nervous system a new introductory section has been written, with new diagrams, which will prove helpful to the student. Most of the important points which have arisen during the past three years have been incorporated,

'In Section IX the article on muscular atrophies has been rearranged.

'In Section X the important studies of Gosio and of Sanger upon arsenical poisoning have been referred to.

'In the section on parasites the subject of psorospermiasis has been recast, a short account of the parasitic infusoria has been added, and a number of minor corrections have been made.'

It will thus be seen that the revision has been careful and additions have been generously made. Though, we have before said, the *Practice* of Dr. Osler is a work of unusual excellence, it must be apparent that with the second edition it has become still more valuable. It is certainly among the best of our modern text-books upon medicine, and its usefulness is the greater because of the simplicity, clearness, and force of its style."

SAUNDERS' YEAR-BOOK OF MEDICINE AND SURGERY. 1896. Collected and Arranged by Eminent American Specialists and Teachers, Under the Editorial Charge of GEORGE M. GOULD, M.D. In one Royal 8.vo volume of about 1000 pages, uniform in size with the "American Text-Book" series. Profusely illustrated. Prices: Cloth, $6.50, net; Half Morocco, $7.50, net. Sold by subscription only. W. B. SAUNDERS, 925 Walnut Street, Philadelphia.

As announced in our December number, this handsome, timely and erudite publication made its appearance during the succeeding month and is now before the profession.

Notwithstanding the rapid multiplication of medical and surgical works, still these publications fail to meet fully the requirements of the *general physician*, inasmuch as he feels the need of something more than mere text-books of well-known principles of medical science. Mr. Saunders has long been impressed with this fact, which is confirmed by the unanimity of expression from the profession at large, as indicated by advices from his large corps of canvassers.

This deficiency would best be met by current journalistic literature, but most practitioners have scant access to this almost unlimited source of information, and the busy practiser has but little time to search out in periodicals the many interesting cases, whose study would doubtless be of inestimable value in

his practice. Therefore, a work which places before the physician in convenient form an epitomization of this literature by persons competent to pronounce upon the Value of a Discovery or a Method of Treatment can not but command his highest appreciation. It is this critical and judicial function that was faithfully and well assumed by the editorial staff of the "American Year-Book of Medicine and Surgery."

It was the special purpose of the editor, so well and widely known by his eminent labors in the journalistic field, whose experience peculiarly fitted him for the preparation of this work, not only to review the contributions to American periodicals, but also the methods and discoveries reported in the leading medical journals of the Old World, thus covering a far wider field and making this work characteristically international. We have here not merely a series of undigested abstracts and clippings massed together, nor "chestnuts" several years old, "flat, stale and unprofitable;" but the treatment presented is synthetic and dogmatic, including only what is new and accepted as valuable. The original and selected illustrations, a splendid feature of the volume, skilfully reproduced, for the most part in the studios of the publisher, established for the purpose, are marked by accuracy of delineation, afford efficient aid to a correct understanding of the text, and add greatly to the attractiveness and value of the volume.

The twenty-nine contributors and collaborators are among the most eminent, active and progressive known to America as leading specialists and authorities in the various fifteen departments embraced in the book. They all stand so high in the profession that a reproduction of their names is not needed here.

WOOD'S MEDICAL HAND ATLASSES—An Atlas of Ophthalmoscopy and Ophthalmoscopic Diagnosis, with an Introduction to the use of the Ophthalmoscope by Dr. O. HAAB, Professor of Ophthalmology, University of Zurich. Translated and Edited by ERNEST CLARKE, M.D., B.S. (Lond.), F.R.C.S., Surgeon to the Central London Ophthalmic Hospital, Ophthalmic Surgeon to the Miller Hospital, etc., etc. 8vo., cloth, with one hundred and two superbly colored figures, upon sixty-four plates, price $3.00. WM. WOOD & Co., publishers, New York, 1895.

The translator in his preface says: "At the request of the

publishers I willingly undertook the translating and editing of this little work, recognizing that it supplied a distinct want." We know that it will prove a most useful guide to the student and practitioner. The plates, printed in colors, some of them requiring twenty-one impressions of various shades and tints to secure the proper effects, have been prepared by one of the largest and most celebrated chromo-lithographers in Bavaria. The arrangements which have been made for the production of these beautiful plates were such as not only to insure the highest artistic excellence, but also to enable the publishers to sell the volumes at a price which has never before been equalled or approached for cheapness. The scientific faithfulness to nature of these plates is vouched for by the eminent medical gentlemen under whose direct supervision they have been drawn and colored.

The volume contains sixty-four plates, with descriptive matter on the page facing it, making a book 5 by 7½ inches in size, exceedingly convenient for reference or study. Four other atlases are to follow—1. Nervous System; 2. Fractures and Dislocations; 3. Obstetrics; and, 4. Gynecology. The price of the series of five will be $15.00.

WOOD'S MEDICAL HAND ATLASES: Atlas of the Nervous System in Health and Disease, together with a Sketch of the Anatomy, Pathology and Therapy of the same, by DR. CHRISTFRIED JAKOB, Practising Physician in Bamberg; formerly First Assistant in the Medical Clinic at Erlangen; with an introducton by Professor DR. AD. V. STRUMPEL. Translated and Edited (authorized) by JOSEPH COLLINS, M.D., Instructor of Nervous and Mental Diseases, New York Post-Graduate Medical School; Visiting Physician to the Hospital for Nervous Diseases, etc., etc. 8vo., cloth, price $3. WM. WOOD & Co., New York, publishers. 1896.

The second issue of the series of Wood's Medical Hand Atlases is more attractive to us than the first, and is a gem indeed, although the first is to the specialist of most marked value. If the others of this series yet to come, can only keep up wit the high character of their predecessors, which from the well-known character of the publishers "goes without saying," the series will form a most valuable addition indeed to the vast stream of medical literature.

No work has ever come into our hand since entering the portals of medicine that gave us more pleasure and satisfaction.

*Such plates!* Oh, shades of Guttenburg, the idea of producing such illustrations by that grand instrument of, and aid to science, the "Printing Press," is enough to make you turn in your grave, and alone cause you to beseech and plead to return to mother earth for a few brief moments to feast your eyes thereon.

A most important department of medicine is here most beautifully, faithfully and instructively portrayed, and any student of medicine or physician can hug himself with joy when he becomes the fortunate possessor of this magnificent atlas.

In size, convenient to hold in the hand, and ever ready for reference, the intricate problems of nervous disease should rapidly assume a remarkable degree of advance. In a prepara. tory note by Dr. Strümpel, in which he most highly commends his former capable assistant, he concludes as follows:

"The individual study of the normal anatomical and pathological conditions in connection with the illustrations which are detailed but not schematic, true representations of the parts as they exist, can not help but be of the greatest didactic use."

"I wish heartily for this work, which the author and publishers have spared no pains to make really good and useful, the success it deserves."

The seventy-seven plates in this volume were so attractive that it was hard indeed to lay the volume down, and when forced to do so by most urgent necessity, left such a yearning as we have not felt for years to again return to and thereon feast our most hungry eyes, are followed by three hundred and thirty pages of text concerning the anatomy, pathology, and therapy of the same of most instructive character. The wonder is how can such a book be produced for the price thereof. To our good friends who have any interest whatever in studying, teaching or practising medicine we would say, buy the book. Yes, buy it, if you have to borrow the money, or sell the shirt off your back.

A Treatise on Nervous and Mental Diseases; for Students and Practitiones of Medicine. By Landon Carter Gray, A.M., M.D., Pro-

fessor of Nervous and Mental Diseases in the New York Polyclinic; Visiting Physician to St. Mary's Hospital, Neurologist to the Hospital for Ruptured and Crippled; ex-president of the American Neurological Society: ex-president of the New York Neurological Sociciety; ex-president of the Neurological Section of the New York Academy of Medicine; ex-president of the Society of Medical Jurisprudence; Honorary and active member and Fellow of various medical societies and associations. Second edition, revised and enlarged. With 172 illustrations and three colored plates, 728 pages. Cloth, $4.75; leather, $5.75. Philadelphia. LEA BROTHERS & Co. 1895.

The present edition has been rewritten very largely, and special chapters upon several subj cts added thereto, notably, upon the newer phases of insanity. Paranoia, that subject which is constantly coming before medico-legal tribunals, is covered in a chapter upon Paranoides which throws light upon this subject such as would often help the ordinary student or practitioner in his care of these cases and in differentiating between the genuine and spurious upon the witness stand.

The bulk of the work is naturally devoted to a systematic account of the various nervous diseases. Here the author's exhaustive acquaintance with the literature of the subject, as well as his own large personal experience are constantly in evidence. The pathology, and particularly the pathological histology of the nervous system, are treated with a thoroughness commensurate with the importance of the subject. It may be noted also, that the sections on treatment are especially full and original, and will be found most helpful and suggestive, even by those of a less sanguine temperament than the author. Many, however, will hardly share the author's confidence in cerebral and spinal galvanism, which he recommends so frequently. The "rest treatment," minus the massage, is enthusiastically advocated. The work throughout is modern, scholarly and practical. The articles on neuralgia, locomotor ataxia, neurasthenia, and railway injuries are particularly noteworthy.

Massage, of which Dr. Gray has made a serious study, is thoroughly discussed, and by following its teachings, the ordinary physician in the country can train his own operators so that they will take, to a large extent, the place of the more skilled and schooled operators, but who are unattainable outside of the larger cities.

AN AMERICAN TEXT-BOOK OF SURGERY, FOR PRACTITIONERS AND STUDENTS. By Charles H. Burnett, M.D., Phineas S. Conner, M.D., Frederic S. Dennis, M.D., William W. Keen, M.D., Charles B. Nancrede, M.D., Roswell Park, M.D., Lewis S. Pilcher, M.D., Nicholas Senn, M.D., Francis J. Shepherd, M.D., Lewis A. Stimson, M.D., William Thompson, M.D., J. Collins Warren, M.D., and J. William White, M.D. Edited by WILLIAM W. KEEN, M.D., LL.D., and J. WILLIAM WHITE, M.D., PH.D. Second Edition, Carefully Revised. Royal 8vo., pp. 1248, price, cloth, $7.00; sheep, $8 00; half Russia, $9.00. Sold only by subscription. W. B. SAUNDERS, No. 925 Walnut Street, Philadelphia.

The want of a text-book which could be used by the practitioner and at the same time be recommended to the medical student has been deeply felt, especially by teachers of surgery; hence, when it was suggested to a number of these that it would be well to unite in preparing a text-book of this description, great unanimity of opinion was found to exist, and the gentlemen above named gladly consented to join in its production.

Especial prominence has been given to Surgical Bacteriology, a feature which is believed to be unique in a surgical text book in the English language. Asepsis and Antisepsis have received particular attention. The text is brought well up to date in such important branches as cerebral, spinal, intestinal, and pelvic surgery, the most important and newest operations in these departments being described and illustrated.

The text of the entire book has been submitted to all the authors for their mutual criticism and revision—an idea in bookmaking that is entirely new and original. The book as a whole, therefore, expresses on all the important surgical topics of the day the consensus of opinion of the eminent surgeons who have joined in its preparation.

One of the most attractive features of the book is its illustrations. Very many of them are original and faithful reproductions of photographs taken directly from patients or from specimens, and the modern improvements in the art of engraving have enabled the publisher to produce illustrations which it is believed are superior to those of any similar work.

The first edition of this great work claimed at once a high place in American surgical literature, and the second can not but add largely thereto. The correctness of the teachings found in

it needs no other guarantee than the names of the authors, who are so well and widely known in this day of advanced and progressive surgery.

THE MEDICAL MUSE. Grave and Gay. A Collection of Rhymes up to Date, by the Doctor, for the Doctor, and Against the Doctor. Collected and Arranged by JOHN F. B. LILLARD. 12 mo., cloth, pp. 141. I. E. BOOTH, Medical Publisher, 35-45 Gold Street, New York. 1896.

The doctor sometimes dips into verse, and sometimes—yes, more frequently verse dips into him, or worse. We have here a collection of nearly 150 poetical effusions, the most of which have appeared in the recent periodical publications, both technical and secular, with a few reproductions of the classical writers of by-gone days, all devoted to, alluding to, or connected with medicine. The collection is a very good one, and will afford amusement and "solace" in our idle hours, or one stolen from the busy duties in a hard-worked profession—too few of whom fail to remember that

> "A little nonsense now and then,
> Is relished by the best of men."

It might have been more complete, but there is no question that the good ones far exceed those of indifferent vein. The editor should have looked more carefully after his proof-reading, in person or by proxy, for many egregious errors of this kind appear, and while much license and liberty is given to all who court the rythmical muse, he need not have made an "ass" out of good old Father Æsculapius in his preface, nor does "appenditictis" rhyme with "light is," on page 139.

The book is dedicated to our very handsome, talented, and intelligent contemporary, Dr. Chas. S. Briggs, of this city.

A MANUAL OF SYPHILIS AND THE VENEREAL DISEASES. By JAMES NEVINS HYDE, A.M., M.D., Professor of Skin and Venereal Diseases Rush Medical College; Dermatologist to the Presbyterian, Michael Reese and Augusta Hospitals, and Consulting Physician to the Hospital for Women and Children, Chicago; and FRANK H. MONTGOMERY, M.D., Lecturer on Dermatology and Genito-Urinary Diseases and Chief Assistant to the Clinic for Skin and Venereal Diseases Rush Medical College; Attending Physician for Skin and Venereal Diseases St. Elizabeth Hospital, Chicago. With Forty-four Illustrations in the Text and Eight Full-page Plates in Colors and Tints. Price,

$2.50, net. W. B. SAUNDERS, 925 Walnut St., Philadelphia. 1895.

"This manual has been prepared," says the author, "with the intent of meeting the special needs of the student and of the practitioner rather than of the expert." The aim has been to supply in a compendium form, and with detail, all practical facts connected with the study and the treatment of syphilis and the venereal diseases. Care has been taken to avoid all points in controversy and to exclude the data which are to be sought for in the more voluminous teachings on these subjects.

The book most admirably answers the purpose for which it has been written, and is one of the best and most practical condensations of the subjects of which it treats yet placed before the profession. It embodies all the practical facts connected with the study and treatment of syphilis and the venereal diseases, and will most admirably meet the special needs of both student and practitioner.

A MANUAL OF THE PRACTICE OF MEDICINE. By GEORGE ROE LOCKWOOD, M.D., Professor of Practice in the Woman's Medical College of the New York Infirmary; Attending Physician to the Colored Hospital and to the City (late Charity) Hospital; Pathologist to the French Hospital; Member of the New York Academy of Medicine, of the Pathological Society, of the Clinical Society, etc. With Seventy-five Illustrations in the Text and Twenty-two Colored Plates. 8vo., pp. 935. Price, net, $2.50. W. B. SAUNDERS, 925 Walnut Street, Philadelphia. 1896.

Contributions to the science of medicine have poured in so rapidly during the last few years that is is almost impossible for the student, with the limited time at his disposal, to fully master elaborate treatises, or even cull from them knowlege which is absolutely essenntial. This manual presents the essential facts and principles of the practice of medicine in a small and available form, and we are confident that the work will meet the wants of many who heretofore have been obliged to rely on the larger works with which medical literature is so well supplied, but to which they have so little time to devote.

In the arrangement of the subject matter the excellent classification of Osler has been adopted with but a few unimportant modifications. It is thoroughly up to date, and the most recent developments are carefully considered.

# THE SOUTHERN PRACTITIONER.

AN INDEPENDENT MONTHLY JOURNAL,

DEVOTED TO MEDICINE AND SURGERY.

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*DEERING J. ROBERTS, M.D.,* - - *Editor and Proprietor*

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## Original Communications.

### NASHVILLE ACADEMY OF MEDICINE.

STATED MEETING, FEBRUARY 6, 1896.

President J. Y. Crawford in the chair.

Dr. M. C. McGannon reported a case of

CANCER OF THE UTERUS, WITH SPECIMEN.

Mrs. S. G., age 52, married thirty years, one child twenty-seven years ago. Normal labor; normal puerperium; nursed infant; menopause five years ago.

Two years ago first noticed some leucorrhœa, watery in character, which gradually increased. One year ago discharges became mixed with blood; she then applied to a physician, and six months ago she had performed an operation for the removal of a tumor (her statement).

She came under my observation two weeks ago when I got the foregoing history. She further stated that she had lost flesh and strength and could not keep herself clean, or free from a disagreeable odor; she had grown very weak.

Examination proved the existence of cancer of the uterus involving the whole of the cervix and the right lateral vaginal wall to a small extent. I advised the extirpation of the organ, which I removed on the fourth inst. by the vaginal route. The operation was prolonged and difficult because of the size of the organ and the narrowness of the vulva and vagina. After separating the bladder and the rectum from their attachments to the uterus, I clamped the broad ligaments, using four clamps, and cut between them and the diseased organ, which was then forced through the vulva with difficulty. Sterilized iodoform gauze was used to keep the intestines from impinging against the ends of the forceps, the vagina was also packed with gauze and the patient put to bed in good condition.

From the time the patient came under my observation until the date of operation the temperature was never less than 100°, while the pulse ranged from 100 to 120, and was weak. The second day, forty-eight hours after the operation, when I removed the clamps, the pulse was 96 and the temperature 99½°. The patient has had practically no suffering, and looks as though she had not undergone any operation.

Dr. W. M. L. Coplin asked Dr. McGannon what he thought of the prognosis in cancer of the uterus, and what is the probable character of this cancer.

Dr. W. D. Haggard, Sr. asked Dr. McGannon if he preferred the abdominal or vaginal route in hysterectomy, all things being equal?

Dr. McGannon—This cancer is evidently an epithelioma, though a microscopical examination has not yet been made. As to the prognosis: Statistics show that when operated on a long lease of life may result, three, five, and even eight years have been added to the lives of some patients. He had followed a case in his own practice for two years, when death took place. The patient, whose case he reports to-night, would have died in four months without an operation. As to method of operating, in cancer he would operate as readily through the abdomen as through the vagina, but in this case the abdominal operation might have killed by shock. It is well known now that the vaginal operation offers greater opportunities for recovery than the abdominal, the mortality being two per cent less in the former. It is easier to operate through the abdomen.

Dr. Haggard said he was surprised to hear Dr. McGannon say that there was no more danger in removing a cancer through the abdomen than the vagina. He had been accustomed to consider the danger of infection as being much greater by the abdominal route.

Dr. McGannon—If the uterus is curreted and cervix tied off, and the surgeon uses any precautions for protecting the peritoneum, there is practically no danger of infection.

Dr. W. J. Morrison reported a case of

FACIAL NEURALGIA SUPERINDUCED BY DENTAL IRRITATION, WITH SPECIMENS.

About the 10th of July, 1890, Miss B., aged 24 years, called to see me in reference to a neuralgia in her face, and stated that she had been suffering for several years. She said the pain began at the first molar of the right inferior maxillary; and, though the tooth was sound, it was extracted, after which she had relief for about eight months. In the spring of 1888, the pain returned, procceded by a tickling sensation in the nasal cavity, and a constant desire to sneeze; an acute pain located in the superior right canine, and extended to the superior molar teeth, and then to the right inferior maxillary.

In the fall of 1888 her suffering was so intense that she sought professional advice; and, from time to time, had her right inferior teeth extracted, until all were removed, without obtaining relief.

In the spring of 1889, the pain again located in the superior maxillary, and she was unable to get relief, although under treatment.

In the spring of 1890, the superior first molar, and second bi-cuspid were removed, but with no better results.

In June, 1890, the first bi-cuspid was extracted, after which the pain became more intense, extending to the temple and ear, and continuing night and day.

After the above treatment, I made an examination and found the oral cavity free from inflammation, and to all appearances in a normal condition. I diagnosed the case as facial neuralgia, caused by impacted wisdom teeth. I so informed the sufferer; but, as I was on the eve of going out of the city for some time,

refused to operate and referred her to one of my professional brethren.

On my return to the city, in September, she called to see me again, and, on the 15th of that month, I removed the superior right wisdom tooth, which was impacted near the floor of the antrum. For some weeks a serum oozed from the wound, which led me to believe that the antrum had become involved. As long as the wound was allowed to remain open, the patient improved rapidly and said she felt perfectly well. After the wound healed the pain returned, and I opened the right antrum and drained it; this gave relief for some time.

Now the pain began in the inferior maxillary, and on November 10, 1890, I removed an impacted inferior wisdom tooth. Although it was a very difficult and trying operation, the wound healed rapidly, and the patient was free from pain until the spring of 1891, when she began to suffer in the region of the inferior canine tooth. Miss B. now informed me that, about two years before, a tooth had been extracted from that location and that the dentist remarked that it was a deciduous tooth, and that a year before this the two superior central incisors dropped out.

In April, I operated and removed an impacted canine. She was again relieved for a little while, after which the trouble reappeared in the region of the superior canine. On the first of May, I operated and removed the two superior central incisors, which were impacted so far up in the process that I found injury to the nasal cavity.

Miss B. was now free from pain until August, 1891, when she began to suffer a little at the point where the inferior impacted canine had been extracted. Pricking sensations were produced in the left side of the face and in the ear; at times there was a dull ache around the left eye. The pain became so intense that, in August, I probed for the left superior wisdom tooth, but failed to locate it.

Pain now made its appearance in the inferior maxillary left side, with intense pain on the right; also, in the region of the superior right canine. To give relief from this intense suffering I leeched the gums, and in April, 1892, I extracted the superior second molar, which was perfect. I again probed for the superior wisdom tooth on the left, but again failed to locate it. The

removal of the second molar gave relief from the intense pain for a year, and allowed the patient time to regain her strength. At the end of that time, the patient being in a condition to stand the operation, I split the process from the first molar back, and found that this tooth was located above the alveoli of the second molar, and removed it. This was in July, and from that time until October the patient was free from all trouble. In October, she began to suffer from neuralgia, and I probed for the inferior wisdom tooth, but failed to locate it. As the patient suffers for a time, periodically, I have not encouraged further operating.

It would consume too much space and time to undertake to give the procedures of each operation, and the condition of, and effects upon, the patient. I would say in conclusion, that, so far as my knowledge goes, this is the most remarkable case of the kind on record, and but for the kindness of your President, Dr. Crawford, and the untiring efforts and valuable suggestions of your Secretary, this case would in all probability never have been reported. I hope no other practitioner will have occasion to report such a case, for I have never seen such indescribable agony, extended over such a period of time, and the practitioner powerless to give relief, coupled with such patience and Christian forbearance on the part of the sufferer.

Dr. J. Y. Crawford said that it had been his good fortune to see this case. He considered it in its extent to have no parallel in the history of dental surgery.

Dr. A. M. Trawick reported

### A CASE OF SCURVY.

Dr. Trawick said he had been consulted by a lady for ulcers in the mouth. An examination revealed the fact that the mouth was literally filled. The patient was weak and anemic with no appetite. She stated she had been in this condition for two years and a half, every since, in fact, she had given up the use of vegetables while living in China. Had had purpuric spots, with bleeding from gums and nose. Nearly all of her teeth were gone He had examined the urine with negative results. She was put on fruits and vegetables, with most happy results.

Dr. Copeland asked if there had been any fever?

Dr. Trawick—No.

Dr. James W. Handly reported

A CASE OF CASTRATION FOR HYPERTROPHIED PROSTATE.

R. P., æt. 57, white, American, 410 South Spruce Street, Nashville, Tennessee. I was called to see him at request of Dr. J. Bunyan Stephens, March 17, 1895. Found him suffering with retention of urine, marked hæmaturia, and general prostration, the result of a long-existing hypertrophy of prostate gland and consequent cystitis.

First relieving him of his retention, I found the bladder filled with dark colored urine, due to decomposed blood, about three pints in amount. Treating locally and constitutionally for a few days, the cystitis was partially relieved, the hemorrhage checked, and he was able to pass urine voluntarily, which was done every two hours day or night.

Some few weeks later he had a recurrence of former attack, which was relieved in a like manner.

May 24th, third attack; when, upon examination of prostate, found it greatly enlarged (bilateral hypertrophy). Advised castration for its relief, which was willingly accepted. Next day, assisted by Drs. Hugh R. Miller and N. D. Richardson, both testicles were removed by means of local anæsthesia, a tourniquet being applied to the base of scrotum. Patient suffered very little pain during the operation, which passed off very smoothly. The cords were ligated *en masse* and external incisions sutured without drainage, secondary hæmorrhage followed the disappearance of the cocaine from the connective tissue, necessitating the removal of sutures, re-ligating the cords and douching scrotal cavity with hot water. Hæmaturia and vesical irritation were relieved in twenty-four hours, the catheter being used during that interim, after which the patient could pass water at will. Previous to the operation he was compelled to get up every hour during the night to pass water, afterward he could retain urine comfortably in the bladder for three hours, and then expel it voluntarily.

Three days after operation a form of mania, or delirium, set in, and it was with difficulty that he was restrained from tearing

clothing, etc., to pieces. At times he would not know his wife or relatives, at other times he was perfectly rational. This condition has not been entirely relieved at this writing, although much improved. His whole physical system, which has been greately vitiated and generally depressed, is now in first-class condition, and his weight is greater than at any time during ten years preceding the operation. I regard the results in this case sufficient to justify the operation, notwithstanding the temporary mania which occurred. I have not been able to examine the prostate per rectum recently; can not say what has been the effect on the enlarged prostate.

Dr. W. F. Glenn said that he had castrated in one case for enlarged prostate, but death had resulted on the eighth day from general exhaustion. He is afraid of the mania which so frequently follows the operation, and the probable occurrence of which Dr. Cabot insists is a contra-indication to the operation.

Dr. W. M. L. Coplin asked if any one had used the organ-therapy in such cases after operation. He thought it might possibly be of some value.

Dr. J. R. Buist reported

### A CASE OF BRAIN SYPHILIS.

This case came first under my observation in October last, through the courtesy of Dr. Altman. A negro man, 32 years old, married, but not living with his wife for the last three or four years. Father living and healthy; mother died many years ago in childbed. Is a general laborer of only moderate mental capacity; considered healthy all his life. In February last, after returning home in the afternoon, was observed by his sisters to have lost his power of speech. This was recovered from in two hours. Everything went on as usual until June, when returning from work he was noticed to act a little queerly, and when spoken to could make no reply, and in a few minutes went into spasms, general but not severe, foaming at the mouth. Next morning he could speak, and after a few days went back to work. His sisters think his speech has never been perfectly restored since this second attack and that his mind has not been as good.

On Monday, November 4th, at 5 p. m., was again speechless, after being apparently well for some days. Between 9 and 10

that night light convulsions returned, he became much excited and remained so for about thirty-six hours. Has not spoken a word since (November 9th).

On the morning of November 11th, at 4 o'clock, convulsions recurred. His sisters state the spasms were all over, but worse in the head and neck. I saw him at noon, and found him hemiplegic on right side. No coma or stupor, looked rational, but speechless, and no apoplectic state present, and no history of any. In addition to the right hemiplegia, the sixth nerve on that side was paralyzed, and convergent strabismus of the right eye was marked. No ptosis; pupils moderately contracted and very feeble reaction to light. The muscles of the right side of face incessantly twitching and jerking. Could not be persuaded to move the tongue, and it should be said in the previous attack three days before, the tongue was apparently paralyzed. The left arm and leg were constantly moved voluntarily. Patella reflex was absent on both sides. On palsied side cutaneous reflex of the sole was elicited, but not to the same degree as on the left side. Retention of urine existed; no relaxation of anal sphincters. At 4, p. m., seen again; no material change except a slight decrease in the paralysis of the right arm. Sensibility of the palsied side appeared normal, but examination not satisfactory.

November 12th. Had slept a little during the night. Right side regaining motion; facial spasms continue. Retention of urine continues.

November 13th. Paralysis decidedly lessened. Had made an attempt to walk. Twitching in face less. Strabismus of right eye has passed off. Could put the right hand to face. No movement of tongue, and no effort to speak, but appears to understand. Bowels had not acted for six or seven days, but acted in a few hours from one drop of croton oil in a teaspoonful of castor oil.

At my suggestion Dr. Altman placed this man on specific treatment.

November 17. Patient has improved since the 13th. Can move the tongue and almost makes articulate sound. Bladder relieved. Slept quietly last night. Still some jerking at right angle of mouth.

On the 19th Dr. Hale made an ophthalmoscopic inspection of the fundus of both eyes, Pupils moderately contracted, and not responsive to light. Two drops homatropine caused slight dilatation of left, none on right. Patient's globes bobbed about so constantly that it was difficult at first to observe the fundi, but Dr. Hale found nothing abnormal. Corner of mouth still jerks. Makes some audible but indistinct sounds. Can protrude the tongue to the teeth.

At this time, November 19, knee jerk of left side exaggerated; of right fairly good. Impossible to get any subjective symptoms owing to his stupid condition. His whole muscular system appears to be weak. Eats and sleeps, and can walk a little.

Pulse has been slow all the time, about 56; respiration slow.

On January 4, 1896, patient's condition physically very good. Occasionally very willful and obstinate, and hard to manage. Mental condition very feeble, and he has very little command of language.

Up to this time had taken large doses of iodide—60 to 70 grains ter. die.—and inunctions for six months.

At this date, February 5th, some improvement in speech, uses several words, and understands what is told him partially. No paralysis or weakness of tongue. Pupils moderately contracted, but not movable. Grasp of the right hand not as strong as that of the left. Is reported to have had attacks of jerking of face and head several times in last two or three days. His mental capaciiy is quite weak and limited. Memory very poor. The specific treatment had been left off for a week or two.

### REMARKS.

In the absence of a syphilitic history, and of any concommitant specific symptoms, a diagnosis of syphilis could only be reached by the therapeutic test. The suggestion of specific brain disease only comes up because the symptoms did not correspond to those of any recognized individual disease. Epilepsy might have been thought of, multiple or disseminated sclerosis was one of the central lesions that was eonsidered, but the absence of general motor paresis, of jerky inco-ordination and tremor and nystagmus was suffi cient to remove all doubt. Re

semblance to paralytic dementia was more striking than to any thing else; yet the tremor and the slow, insidious course were lacking. The symptoms were mixed, and when this is the case our suspicions of syphilis should be awakened. That there was a hysterical element in the case I believed from the first, and at one time I had almost concluded to regard it solely as such. My opinion, however, has for some time been that the hysteria is only an epiphenomenon, and as Dr. Gowers so well points out, this is a pregnant complication in organic brain trouble.

As is well recognized nowadays brain syphilis may occur at any time after the initial infection—from the first year to the twentieth—and may also be the only existing manifestation at the time.

When the syphilitic poison attacks the brain it is under the type of a slow, chronic inflammation, having the same minute histological elements, whether in the form of a gumma of some size, or in that of a circumscribed thickening of the pia, or in that of arteritis. Very often these three anatomical forms are conjoined in one or more parts of the brain. It is this peculiarity that makes it difficult to localize a syphiltic lesion, and at the same time assist in differentiating brain syphilis from other cerebral affections. Medical history clearly gives evidence that visceral lesions due to syphilis were recognized for a long period before the time of John Hunter, but as he strongly contends that such lesions could not be traced to this specific poison, the opinion of every other observer was overshadowed by his high authority, and it was not until Virchow entered the field and conclusively established the existence of cerebral and other internal diseases of specific origin that Hunter's doctrine was overthrown. The labors and writings of Heubner, in 1874, perhaps have done more to inform the profession on this subject than those of any one man—especially upon arteritis.

The symptoms in this case, in my opinion, are referable to to multiple lesions of the brain. Probably the paralyses of one or both hypoglossal nerves, the first symptom, was due to a patch of meningeal thickening about the medulla, as well as the latter palsy of the abducens of the right side. The irritative symptoms of the right facial I suspect also due to inflammatory condition about the origin of the seventh nerve. The convulsive

attacks I would rather refer to meningeal lesion, more or less diffuse deposits on the convexity; and the right hemiplegia to either pressure or some involvment of the adjacient cortex over the left motor area. But it is quite possible that some occlusion due to arteritis may have done the damage to the left hemisphere.

The question whether the patient was and is now aphasic is an interesting one, but was rather difficult to decide, especially in the early part of his sickness. To pronounce on the existence of aphasia, we must be sure that no paralysis exists of the tongue. Then the patient must have inteiligence enough to signify in some manner his comprehension of what is said or done. At present his speech defect would seem to be aphasic—that is, an inability to use words belonging to the usual ideas—but his intelligence and mental capacity are too weakened to be sure of the nature of his speech defect.

Anti-syphilitic treatment promptly arrests the progress of the disease and causes absorption of the products of the virus, but it can not restore a damaged brain or an occluded artery to its integrity.

Dr. W. M. L. Coplin had seen one case when the symptoms were as well marked. There were several convulsive seizures. Plenty of albumen in the urine. Post mortem showed extensive punctal hemorrhage. Sections were made which showed all the evidences of syphilitic arteritis. He considered Dr. Buist's case a similar one. Was there albumen present in the urine?

Dr. Buist—No, though several examinations were made.

### SOME RECENT HERNIA OPERATIONS.

Dr. Paul F. Eve, reported the following:

The cases that I will report to-night will be limited to strangulated hernia, and these to the last six cases that have come under my treatment. My reasons for calling your attention to them is for the reason that they have proved interesting to me, from the fact that they were all strangulated by the neck of the hernia sack. Four of the cases were scrotal hernia, the other two, direct inguinal hernia. In each of these cases, when I got to the rings, after operating, I was surprised to find the openings quite large, and satisfied that they were not the point of constriction, upon opening the sack I readily found that the point of

the stricture was the neck of the sack. This constriction was cut easily, and the hernia placed back into its natural habitat. From the history of these cases, I am led to believe that the neck of the sack is much more liable for strangulated hernia than is set down in our text-books; and the knuckle of gut may be, as it was in one of these cases agglutinated by its opposed serous surfaces, with no strangulation or constriction at the rings.

Dr. T. H. Wood read a paper on

ACUTE GLAUCOMA FOLLOWING DIVISION OF THE CAPSULE.

Patient, W. C. A., male, age 50, consulted me December 17, 1894. Found cataract in each eye, ripe in right eye, unripe in left. December 18th removed right lens by "simple extraction," using irrigation of aqueous chamber with warm salt solution to remove cortex. After-treatment was simple, the recovery uneventful, and December 28th patient returned to his home in the country.

March 1, 1895, patient came to have the opaque capsule divided, and to get cataract glasses. Examination: Pupil central, circular and movable. Capsule opaque. Vision with $+11$ D. sph.$=\frac{20}{60}$. Divided opaque capsule, using Knapps' knife-needle.

March 2. Eye shows no reaction. With $+12.00$ D. sph. vision$=\frac{20}{20}$. With $+15.00$ D. sph., reading was easy. Patient returned home.

March 6, Patient writes that the right eye is paining him.

March 17, patient came to Nashville, I being absent from the city Dr. Hale kindly treated the case until my retnrn. Dr. Hale found eye with glaucoma and used eserine, depletion and rest. Upon my return I saw patient with Dr. Hale. Found right eye the seat of a violent attack of acute inflammatory glaucoma. Tension$=+2$. Vision=perception of light. Above treatment was continued.

March 31 we did an iridectomy. Marked relief from the pain followed. The inflammation gradually subsided.

April 17 patient returned home. Eye free from pain, and free from inflammation, but with opacities about front of vitreous, and vision=fingers.

I have seen the patient occasionally since, and have had sev-

eral letters from him. The eye has continued free from pain or inflammation. The vision beginning with the iridectomy has slowly but gradually and continuously improved, until now by using his glasses he can read and write, and in fact does the work of tax collector, depending for vision upon the eye.

There are two points in this case worthy of special note, as follows:

1. The development of acute glaucoma following within a week the division of an opaque capsule. This unfortunate sequel I regard as rare. I have seen but three cases, to-wit: the one above in my own practice, and two cases in the clinic of Dr. Knapp. The glaucoma is probably caused by ploughing up the vitreous, which is to an extent unavoidable in dividing the capsule.

2. The marked effect of iridectomy upon vision. In the above case the pain was severe, and the iridectomy was done to relieve it. Vision was almost totally lost at the time, and it was not hoped to restore it by iridectomy. Nevertheless, after the iridectomy, vision commenced to improve and gradually continued to do so until now the patient can both read and write.

In each of the three cases of this type of glaucoma that I have seen iridectomy was done, and in each case the result was gratifying.

### PRESENTATION OF INTERESTING HEART SPECIMENS.

Dr. W. M. Late Coplin exhibited a number of specimens of heart cases. The first specimen was one of aortic aneurism, involving the transverse and descending portions of the arch. The heart was normal. The aneurism was of the tubular form. Death had resulted from other causes.

The second specimen was one of ulcerative endocarditis. The patient had died from uræmia. Two of the valve leaflets of the aorta were totally destroyed. This case, like nearly all cases of ulcerative endocarditis, came to the post mortem table without a diagnosis. A blood examination ought to enable one to make a correct diagnosis in the majority of cases.

### EXTRA-UTERINE GESTATION OF THREE MONTHS.

Dr. Richard Douglas reported as follows:

The case was one of intra-peritoneal rupture, the abdomen

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# Selections.

MALARIAL HÆMATURIA.*—The subject that I will present ou is an entirely practical one; one that has already had h prominence given to it, as is evidenced by the many arti- written thereon in the medical journals of the country; one t is clinically familiar, doubtless, to every member of this iety. I allude to malarial hæmaturia.

I refrain from discussing the inappropriateness of this term, well as the many designations that have been suggested, in ttempts to express its inceptive and general pathology, or the ss classical and technical titles based upon some prominent ymptom or locality in which the disease is most frequently encountered. I accept the announced appellation, since the disorder is more generally known as such, though it but very impotently expresses sufficient meaning to stamp the individuality of the disease.

Etiolgically considered, malarial hæmaturia continues as much an engima as ever. Many theories have been advanced from time to time to account for the remarkable features encountered, but have failed to throw any permanent or satisfactory light upon the subject.

It is generally stated, and I believe it to be true, that malaria is the *primary* cause, but beyond this all manner of conjecture is indulged in to explain phenomena that seem peculiarly its own. It is the purpose of this paper to gather into appreciable shape some conclusions drawn from the observation of a number of cases occurring in my practice in southern Arkansas and northern Louisiana during the past fourteen years.

In all of the cases malaria in some of its manifold forms had preceded or ushered in the attack, and though this fully pictures the materiality of the disease, it fails to express intelli-

*Read before the Little Rock Medical Society.

gently the phenomena that follow. The conviction forces itself upon my judgement, that the disease is not due to the direct or fulminant form of malaria, but is altogether *secondary* to the effect of the original poison introduced into the system and has therefore only a correlative claim upon the initiatory *materies morbi* by physiological disturbance and pathological effect; the form and gravity of the disease depending upon the secondary complications, their nature and locality.

Thus we see that malarial hæmaturia, in a broad sense, has been made to express pathologically, a variety of conditions, designated by some as distinct types rather than stages of the disease, and this has given rise to the crudeness and incertitude of therapeutic management.

The secondary manifestations are positive and important, and without a clinical estimate of their extent and character a successful treatment is extremely doubtful.

What then are these secondary conditions usually encountered producing the remarkable and grave features of this disease? For convenience, and in order to estimate the pathology and treatment of each type of the disease, I will attempt to answer this question in defining the varities of the disease. As to the types, I will follow the division most generally accepted, viz: Intermittent, remittent and congestive, although the last named does not express the *complete* pathological nature of that type. In the intermittent type there is usually a chill followed by more or less fever accompanied by hæmaturia, which clears up with the subsidence of the fever; jaundice may or may not appear and nausea is slight. In this class of cases the blood is not disintegrated, and examination of the urine passed during the attack will show the blood corpuscles entire—that is, the cell membrane and contents intact. In this way we have merely functional disturbance from congestion of the liver and kidneys, the accompanying hæmaturia not differing in character from hemorrhages that occur in other cases, in all forms of a low grade of malarial toxæmia. Instance, the frequent occurrence of hemorrhages from the nose or bowels.

The danger here lies in the threatened impermeability of the kidneys due to hemorrhage, mechanically forcing uræmia upon the scene. Evidently prompt and efficient cinchonism with a

mercurial purge and local warmth to the region of the kidneys will check the malarial influence, relieve the congested and function-disturbed organs and reinstate the patient.

In the remittent form the patient has usually suffered from recurrent attacks of simple intermittent fever and upon the occasion of one of these attacks the chill is more intense and prolonged, the fever running higher; jaundice and hematuria supervene, accompanied by nausea and vomiting. This type will either present the symptoms of the intermittent much intensified, or will, by prolonged disturbance of the functions of the liver and stomach, assume the character of the more malignant or so-called congestive type. This is by far the most frequent form in which the disease is met and generally yields kindly to treatment in forty-eight or seventy-two hours.

Seen in the beginning quinine hypodermatically should be given to thorough cinchonism; 20 grains of the mild chloride of mercury followed in six or eight hours by black draught sufficient to produce copious stools; nausea and vomiting controlled by hypodermics of morphia and atropia; turpentine in 15 to 20 drop doses every four to six hours, which has both hæmostatic and diuretic properties, will enable you to master the situation save in those cases which rapidly grade into the congestive form, requiring in their treatment measures that will be more fully stated under the next type.

In the so-called congestive type we have the disease in its worst and most virulent aspect; the chill is sudden, profound and prolonged; the face gives expression to the greatest anxiety; jactitation coupled with unremitting nausea and vomiting is present; the normal urine is suddenly changed to that of a dark, *blood-like* fluid, greenish by reflected light, which is copious and frequently discharged. After an elapse of several hours the conjunctival and cutaneous surfaces become deeply jaundiced, the pulse, at first frequent and full, becomes weak and gaseous, the respiration sighing and coma or convulsions complete a picture that is almost a symptom of dissolution.

Chemical and microscopical examinations of the urine, show that although the whole of the ingredients of the blood corpuscles are present, scarcely a single entire blood cell is to be found, their contents however being visible in every direction. The

presence of disintegrated blood, with circulating quantities of hæmato-globulin, blood discs and white corpuscles emphasizes the rapid and fatal destructive power of some toxic agent. The question here naturally arises, can we with any degree of certainty determine what the toxic agent or agencies are that can produce this fatal chain of symptoms?

Recent investigations as to the toxicity of bile has in my opinion cleared up the puzzling question.

Bouchard in his most excellent work "Auto-intoxication in disease," states with reference to experiments with the biliary salts, that they "do not kill by direct intoxication alone. We can see under the microscope the harm which they do; they dissolve and break up the blood globules and other cells—striated muscular fibres and the cells of the liver; they therefore cause anatomical lesions and intoxication arises from setting free of toxic substances which enter into the composition of the cellular elements." Again he says, "Besides the disorders resulting from the suppression of the hepatic functions in malignant jaundice, the kidneys, if not already disordered, soon become so."

In the same way that lead, mercury and cantharides when being eliminated, cause true toxic nephritis, so do the biliary poisons and the poisons fabricated in a secondary manner, by imperfect dis-assimilation, during their elimination, produce renal changes. This is, then, a fresh hindrance to renal ejection, and a new cause of the retention of poisons in the system. Lastly, the vessels also become affected; extravasations are produced, and in some cases, which cannot be called exceptional, renal hemorrhage still further increases the impermeability of the kidneys. Thus while the chances of biliary poisoning diminish, causes of secondary poisoning appear, which continually increase in consequence of the renal impermeability, the anomalous elaboration of the liver and the alteration of all the cells of the body.

Again he says, "Clinically speaking, if all the bile secreted in eight hours were introduced suddenly into the blood, we should see fatal nervous effects produced immediately." Also "that the bile coloring matter is ten times more poisonous than the biliary salts, and that the toxic activity of the hepatic secretions is six times greater than the toxic activity of the renal

secretion, and that the bile is nine times more toxic than urine."

I have made the foregoing quotations in order to establish the toxicity of the bile, and from this outline the pathological processes as they evolve from the disease we have in question. Thus we have the long continued action of the malarial poison upon the system, crippling and modifying the functional activity of the liver and other abdominal organs, culminating in a chill followed by fever, and in which the liver having sustained the greatest damage, yields its bile, possibly by osmotic change, permitting the bile to pass from the biliary cell into the blood vessels thus extending itself into the general circulation and causing thereby the secondary changes consequent to biliary poisoning, notably degeneration of the hepatic cells, inducing atrophy of the liver and suppression of its function. Urea, an important diuretic substance, is diminished, and a diminution of renal activity results, lessening thereby the elimination of the biliary poisons and offering a new and potent danger through the threatened impermeability of the kidneys. Should renal inadequacy supervene, a fatal termination will result by the non-elimination of the toxic products which should be carried off by the urine. Thus we have retained in the system toxic agents originating from dis-assimilation, from the biliary secretions, intestinal putrefactions; and all the poisons that should be eliminated through the kidneys. It is evident therefore that as long as the kidneys are permeable, complete recovery is possible. The treatment in this form of the disease taxes the ingenuity and therapeutic knowledge of the physician in the highest degree. It is in these cases that quinine is powerless to combat and remove the diseased eliminations that suffuse the system, on the contrary its administration is hurtful and a loss of valuable time. Every indication is to promote relief by aiding elimination and every source must be called upon.

Pilocarpine given hypodermatically is a valuable remedy to promote the action of the skin, but is inadmissible after the pulse becomes weak and the patient is depressed. Brisk cutaneous friction, a hot air, a steam or a hot water bath offers a safer and more efficient means. In the early stage of the disease, when the actions from the kidneys are frequent and copious it is well to restrain their frequency by giving hypodermatically

a dose of morphine and atropine, at the same time urging other emunctories to eliminative work. Later, notwithstanding that a non-stimulant diuretic would seem to be indicated, we find that the spirits of turpentine gives beneficial results. The bowels afford the speediest and best pathway, and no remedy so valuable as the mild chloride of mercury in large and repeated doses, followed by saline purgatives.

Elimination by this plan is to be kept up daily until the violent symptoms gradually give away, which will be evidenced by a clearing up of the urine and cutaneous surfaces, lessened nausea and vomiting and the absence of coma and convulsions.

There are several minor points in the successful treatment of these cases that will naturally suggest themselves as the indications appear. Sequelæ are frequent, and nephritis notably the most prominent. Fully realising the impossibility of laying down a specific treatment for a disease that is not a pathological entity, I hope that I have been sufficiently explicit to make clear the pathological conditions that we have to combat, and that the cases as they are met will indicate the character and extent of treatment necessary to a successful termination of the disease.—*J. J. Newton, M. D., of Little Rock, in Jour. of Ark. Med. Soc.*

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PROSTATECTOMY.*—The operation which I have described has proved so satisfactory with me that I desire to present to the society two cases of prostatic hypertrophy in which the prostate was removed by this method. These cases were both unfavorable ones for operation, but they show, I think, what good results may be obtained in advanced prostatic disease, even in unfavorable cases, by prostatectomy, and also the efficacy of the method of removing the prostate which I have heretofore advocated. As the steps of the operation have never been fully published, I may briefly describe them.

The patient is prepared, when possible, by giving a cathartic the night before the operation, and by emptying the lower bowel by a large enema the following morning.

The bladder is washed immediately before the operation with a solution of nitrate of silver (1 to 6,000).

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*Read before the Society of Alumni of Bellvue Hospital, December 4, 1895.

The patient being anæsthetised, the bladder is emptied by catheter, and is then distended with Thiersch's solution, ten ounces being sufficient in most cases to bring the bladder well above the pubes. I have entirely discarded the use of a rectal bag.

The bladder is then exposed by a vertical incision between the recti muscles, and two retraction sutures are introduced through its wall. Between these an opening is made into the bladder large enough to allow the operator to insert two fingers.

The cavity of the bladder and the projecting portions of the prostate are now examined.

The suprapubic opening is then covered with gauze, and the patient placed in the lithotomy posture. A staff is passed into the bladder through the urethra and held by an assistant. The membranous urethra is then opened by a median perineal section, the floor of the urethra being thoroughly cut from just behind the bulb back to the apex of the prostate. This must be done thoroughly.

The staff is then withdrawn and the gauze removed from the suprapubic wound.

The surgeon washes and now disinfects his hands.

Two fingers of the left hand are then passed into the bladder through the suprapubic wound, and by these the prostrate is pressed downward into the perineum.

With the forefinger of the right hand the surgeon begins the enucleation, which is performed entirely through the perineal opening.

The outer sheath of the prostate is broken into by the finger just beneath the mucous membrane of the prostatic urethra, and the entire prostate is shelled out from within its sheath by digital dissection. The mucous membrane of the bladder and prostatic urethra with the underlying muscular tunic is stripped up, but is not opened.

The right and left lobes are first removed, after which, if there is a middle projecting tumor, this can be pressed downward into the perineal wound and enucleated in the same manner. During the enucleation the prostate is to be drawn down into the perineum by forceps.

After the removal of all the prostatic growth the wound is

flushed with 1-to-5,000 bichloride solution, a perineal tube is inserted into the bladder, and a rubber drainage-tube of moderate size is placed in the bladder above the pubes. The upper part of the suprapubic wound is then closed by sutures.

The after-treatment consists in daily washings of the bladder, fluid being injected into the suprapubic tube. All urine flows out of the perineal tube.

The upper tube is removed on the sixth day, and the lower tube three days later, after which the bladder is washed by catheter through the perineum for a few days.

A full-sized sound is passed at the end of the second week, and then every five days until the perineal opening closes. The wounds have usually healed in the course of five weeks.

The advantages of this method are, I believe—

1. Great diminution of hemorrhage.

2. The mucous membrane of the bladder and prostatic urethra is kept intact, thus avoiding the danger of septic absorption.

3. The best possible drainage of the bladder is obtained.—*Samuel Alexander, M.D., in N. Y. Med. Jour.*

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ARTIFICIAL RESPIRATION.—The necessity of familiarity with all the means at our command, with which to maintain respiration, when, from any cause the respiratory movements are arrested, is apparent to all. Recent experience with the Laborde method of artificial respiration, by Dr. Edward Martin, of Philadelphia, have led him to give endorsement to this simple, yet successful method of resuscitation.

In the December, 1895, number of the *Therapeutic Gazette*, Martin has this to say: "More than three years ago Laborde announced that respiratory movements which had ceased from asphyxia or other causes, life not yet being extinct, could be restored by rhythmical traction exerted upon the tongue." * * The physiology of this method is explained by Laborde thus, traction upon the tongue directly exciting the diaphragm to its respiratory function; the sensory impulse being conveyed by the superior laryngeal, terminal, tracheal and bronchial expansion of the pneumogastric, the glosso-pharyngeal and lingual, exciting a re-

flex, which is expended upon the motor respiratory nerve, particularly the phrenic. The method is applied as follows: Asphyxiated person is placed on his back, with the head low, the clothing is loosened about the neck, and the jaws are opened and kept opened by a wedge passed between the molar teeth, a knife handle, or cane end, or any other object of suitable size serving for this purpose. The throat is freed of mucous by the finger, or by a handkerchief wrapped about the finger. The thumb and index finger are covered by one thickness of a handkerchief, to prevent slipping, and then the tongue is seized as far back from the tip as possible. Fifteen times to the minute and at about equal intervals, the tongue is pulled out sharply, and the tension immediately relaxed. This traction must be exerted so that the whole body of the tongue is affected, and not merely its point, At the time the first two or three tractions are made, it is well to introduce the index finger of the other hand into the pharnyx, as though an effort were made to induce vomiting. These tractions should be kept up at least thirty minutes, and may be continued an hour. When assistants are at hand this method should be reinforced by mechanical artificial respiration. It may be further reinforced by external heat and friction of the body.

Every anæsthetizer should have a pair of flat-billed forceps with which to seize the tongue and draw it forward when respiration becomes obstructed or fails. Striking cases, both in this country and Europe have been reported, showing the usefulness of this method. Especially is it valuable when but one method of artificial respiration can be adopted, as in the case of a single helper in charge of an asphyxiated patent, then it is that the Labrode method is preëminently the best. Because of its ease of application and its efficiency, this method should be taught as the first and most efficient means of resuscitating the apparently dead.—*Med. Fortnightly*

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Rational Treatment of Pertussis.—Pertussis is a contagious disease of unknown bacterial origin, which manifests itself in a spasmodic cough. It is a local disease of the larynx, acting upon the nerve supply, and causing spasms of the organ.

The course of the disease shows three distinct phases—the catarrhal, paroxysmal, and declining.

The first stage shows only the mild catarrh of the bronchi, nose, or conjunctiva, with excessive watery secretions. This lasts from two to seven weeks, or even less time in infants.

The paroxysmal stage affirms the diagnosis by its characteristic whoops. The expectoration is watery, sometimes bloody. There is sometimes vomiting or other digestive disturbance.

The whoops may occur every half-hour, and a cyanotic condition develops which sometimes leads to asphyxial convulsions and death. The irritation may favor capillary bronchitis and catarrhal pneumonia. After ten weeks the paroxysms become milder, and the declining stage is reached.

In treatment, as the disease is local and affects the larynx, we treat it locally. It is of neurotic character, and therefore we give a drug which acts on the nerves. For local laryngeal treatment, we find that ordinary antiseptics, inculding boracic acid, thymol, resorcin, bromoform, mercurials and many others used, are too weak or too irritating. Peroxide of hydrogen is the most effective antiseptic and least irritating we possess. It should be sprayed directly into the larynx of the child, in the strength of 30 volume peroxyde (hydrozone) 1 part; distilled water, 10 parts; glycerin, 1½ part. The parents may be taught to do this two or three times a day. If the physician administer it, a solution newly prepared each time should be used.

Belladonna should be restored to its former use, and given, as Jacobi says, in such doses as to get the belladonna action—the flushing, which, in a child two years old, is six drops of the tincture three times a day. This is increased to gtts. xxv (!) as a maximum for the adult.

If the paroxysms are severe, paint larynx with cocaine. If vomiting is severe, give menthol. Fresh air, good nourishment and tonics are absolutely essential. Alcohol may be of service. *F. T. B Fest, M.D., in Jour. Am. Med. Ass'n.*

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Syphilitic Lesions of the Heart.—Dr. H. P. Loomis in *The American Journal of the Medical Sciences*, October, 1895, reports the results of his clinical study of syphilitic affections of the heart. The following illustrates these conditions:

1. Gummata.—Recent: Soft, reddish or gray masses: Old: Dry, yellow, cherry nodules.

2. Fibroid Induration.—Localized: Well-defined masses, large size. Diffused: Accompanied by Inflammation of the arteries. Intermediate form: Outer zone of gumma develupes into fibrous tissue, cherry centers, remains as fibroid mass.

3. Amyloid degeneration.

4. Endarteritis obliterans, often inducing infarctions.

The symptoms are as follows: When symptoms of cardiac failure occur during the prime of life for which no cause can be ascertained, such as rheumatic history, valvular disease, arterial changes, or kidney complications, especially one with a syphilitic history, these should always suggest syphilis as the cause of the condition. Dyspnœa, distressing palpitation, præcordial uneasiness, syncopal attacks, a feeble and rapid pulse, are features observed in most of the cases. The symptoms of the interstitial forms are such as would pertain to any disturbance in the function of the muscular tissue of the heart; so, where a syphilitic patient has suffered for a long time from irregularity of the heart's action, severe palpitation, and interference with the systemic circulation, the possibility that this condition may be due to syphilis should never be lost sight of. A rapid improvement in the patient and the amelioration of the cardiac symptoms which will quickly follow anti-syphilitic treatment are important factors in arriving at a positive diagnosis of syphilis of the heart. Patients suffering from changes in the heart due to syphilis either die suddenly, with few if any symptoms directly traceable to faulty heart action, or succumb apparently from syphilitic marasmus, with all the symptoms of a slowly increasing cardiac failure.—*Med. Fortnightly.*

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SOLANUM CAROLINESE (HORSE NETTLE) IN THE TREATMENT OF EPILEPSY.—Potts (*Therapeutic Gazette*, December 16, 1895) reports the results obtained with Solanum Carolinese in twenty-five cases of epilepsy, which came under his observation at the clinic for nervous diseases of the hospital of the University of Pennsylvania. Of the cases twenty-one were idiopathic, three organic, and one probably so. Eight of the idiopathic

cases either did not return after the first visit or else were not under observation sufficiently long to offer a fair test. Of the remaining seventeen cases, five, including two organic cases, were not improved. In the remaining twelve cases the results showed more or less benefit from the use of the drug. Four of the five unimproved cases were benefited by other remedies, such as antipyrin and bromides, but in the remaining one no drug was of service. The dose of the Solanum Carolinese was thirty drops to a tablespoonful of the extract three or four times daily. No unpleasant effects were observed, excepting a mild diarrhœa, which in many epileptics is more of a benefit than otherwise. The conclusions derived from the results were as follows:

1. That the drug has a decided influence for good upon the epileptic paroxysm.

2. That this influence is probably not so great or so sure as that obtained by the use of antipyrin and the bromide salts, or even of the mixed bromides.

3. That in those cases in which it is of service it relieves the paroxysms without causing unpleasant symptoms, such as are sometimes caused by the use of large doses of the bromides.

4. That the dose ordinarily recommended (ten to fifteen drops of fiuid extract) is too small, and that as much as a teaspoonful or more four times daily is often needed to secure results.—*Univ. Med. Mag.*

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Tumors of the Thyroid Gland.—Cooke (*British Medical Journal*, June 8, 1895) suggests the seven following rules in removing the thyroid gland:

1. Give chloroform, as ether engorges the already enlarged veins.

2. Observe scrupulous cleanliness, have plenty of assistance, and many forceps and ligatures handy.

3. Take plenty of time.

4. After exposure of the cysts use only directors and fingers for dissecting, and keep close to cyst wall.

5. Keep the fingers and the wound moist with an antiseptic solution sufficiently weak not to irritate the sensative and important nerves sometimes exposed, and, as far as possible, keep the parts in their normal position.

6. Partially evacuate a large cyst before removal to assist the latter stages of the operation.

7. Insert a small drainage tube before sewing up, for fear a collection of serum should press upon the trachea.

He considers the following as indications for removal:

1. If the tumor be steadily increasing in size.

2. If there be troublesome pressure upon the trachea, esophagus or nerves.

3. If the tumor be so placed as to render impossible a possibly necessary tracheotomy.

4. If the patient strongly urge its removal because of its unsightly appearance, or its interference with the movements of the head.—*Univ. Med. Mag.*

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Business Before Pleasure.—Over the portal of the Law and Medical Department of the old University of Bologna, Italy, appears the following:

"Dum ægrotus visitatur,
Et processus ventilatur,
Cura te accipere;
Nam ægroto restituto,
Et processu absoluto,
Nam curet solvere."

A Brooklyn lawyer translates it, thus:

"While abed the sick man's lying,
While the client's cause you're trying,
That's the time to get your fee!
For when the patient has recovered,
And the law suit's won and smother'd
No one then will care for thee."

—*Extract from a letter to the editor of the North Carolina Medical Journal.*

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A Ten-Year-Old Mother in Virgina.—Annie H., was born in Bland county, July 15, 1885, and September 10, 1895, she was delivered of a well-formed child, weighing five pounds. She was only ten years and nearly two months old. The girl had no development of a woman, although she menstruated regularly since five years old. The labor was a short and uneventful one,

and two hours afterwards the child-mother wanted to get up and dress, and would have done so had she been permitted.

There was no developement of the mammæ or secretion of milk; the baby was nourished through its short existence (as it only lived a week) by its grandmother, who had a child only a few months old. The parents of the child, Mr. and Mrs. H., are prosperous, intelligent and worthy people, and there is no doubt about their child's age.

The child is now well and plays about with the other childrn as if nothing unusual had happened.—*Medical Record.*

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ADMINISTRATION OF SANTONIN.—Combemale of Lille (Bull. Méd, du Nord, July 12), from his personal experiments in acute poisoning by santonin, concludes that the moment the drug appears in the urine it becomes dangerous. When within two hours after a dose of santonin the urine takes a red color on the addition of potassium solution, the danger is imminent. This test can be employed to detect a slight degree of intoxication by the drug and prevent chronic or subacute poisoning. If the santonin be followed by a purgative to evacuate the ascarides for which the vermifuge is given, there will be no necessity to give large doses, a practice which the author deplores.—*Universal Med. Journal.*

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TREATMENT OF HEMORRHOIDS.—An exchange, quoting from a German publication, recommends a procedure in the treatment of hemorrhoids which seems rational. It consists of painting the nodules once daily with a two per cent. solution of nitrate of silver, which causes a gradual reduction in size without the least pain. In the cases reported the tumors had entirely disappeared in the course of one or two weeks. As there are many patients who positively refuse operative treatment this new procedure is well worthy of attention.—*Alkaloidal Clinid.*

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RHUS TOXICODENDRON has been recommended as an efficacious remedy in sciatica and other forms of neuralgia occurring in individuals with rheumatic tendency.—*Am. Medico-Surgical Bulletin.*

LARYNGEAL COUGH —A marked feature of *la grippe* and similar affections is the laryngeal cough so frequently remaining after the other symptoms have passed off. It presents in the form of an irritation in the larnyx, with some huskiness, wheezing and dry cough, occurring by day, increased by exertion, but becoming worse at night, when it often keeps the sufferer and all his neighbors awake for hours. There is generally no expectoration, or at most a little tough, adhesive, gray mucous, only dislodged after prolonged and racking paroxysms of coughing. When I add this laryngeal irritation has continued with undiminished intensity for over a month after the other symptoms have abated, and that it has defied all ordinary and many extraordinary remedies, the clinical picture is complete.

Finally, after many failures, I have hit upon a remedy. The the secret lies in the union of the right expectorant with a digestive stimulant, In all the cases there has been some gastric trouble, indigestion, and eructations of gas, with a tendency to constipation. Malt-extract is indicated here and of the malt preparations it occurred to me that maltine with yerba santa, known as "Malto-Yerbine," would be worth a trial. I ordered a bottle, and in the first case just four doses sufficed to completely cure the cough I had vainly combated for a month. I tried the remedy in other cases with the same good results. During the last two weeks I have ordered about fifty bottles and in no case has it failed. It is difficult to say how many cases are represented, because in one family six persons were cured by one bottle; in another four, in another three, etc. But the preparation has been tested in so many cases that it is evidently of real value in this very intractable sequel of *la grigpe* and kindred affections.—W. F. Waugh, A.M., M.D., in "*Times and Register.*"

[In the treatment of all pulmonary and bronchial affections Malto-Yerbine is a most reliable agent. It is also a most excellent vehicle for quinine and ammonia salts,—Ed. S. P.

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THE VALUE OF VOLUMINOUS INTESTINAL ENEMATA OF WARM SALINE SOLUTION IN POST-PARTUM HEMORRHAGE.—The followine case is related by Dr. John P. McNeill, of Burwood, in the *Australasian Med. Gazette* for December 20th. He

was called to attend a woman upon whom an abortion had been performed. He found her practically dead from hemorrhage; respiration had ceased; the cardiac action had been reduced to faint muscular contractions, and there was no pulse anywhere. She was absolutely unconscious, her body was cold, and the power of deglutition, as well as sensation, was completely gone. Chiefly, says the author, for the sake of doing something, he poured from about one to two gallons of tepid water into a large basin, added a teaspoonful of salt to it, and filled the large intestine to tension limits with a long tube which was attached to a syringe. He removed the fœtus, clots, etc., by rapid digital movement, and then employed artificial respiration. He also injected hypodermically both strychnine and ether, but with apparently no result, After fifteen or twenty minutes the patient began to breathe, and was soon able to swallow a stimulant. She made an uninterrupted recovery.

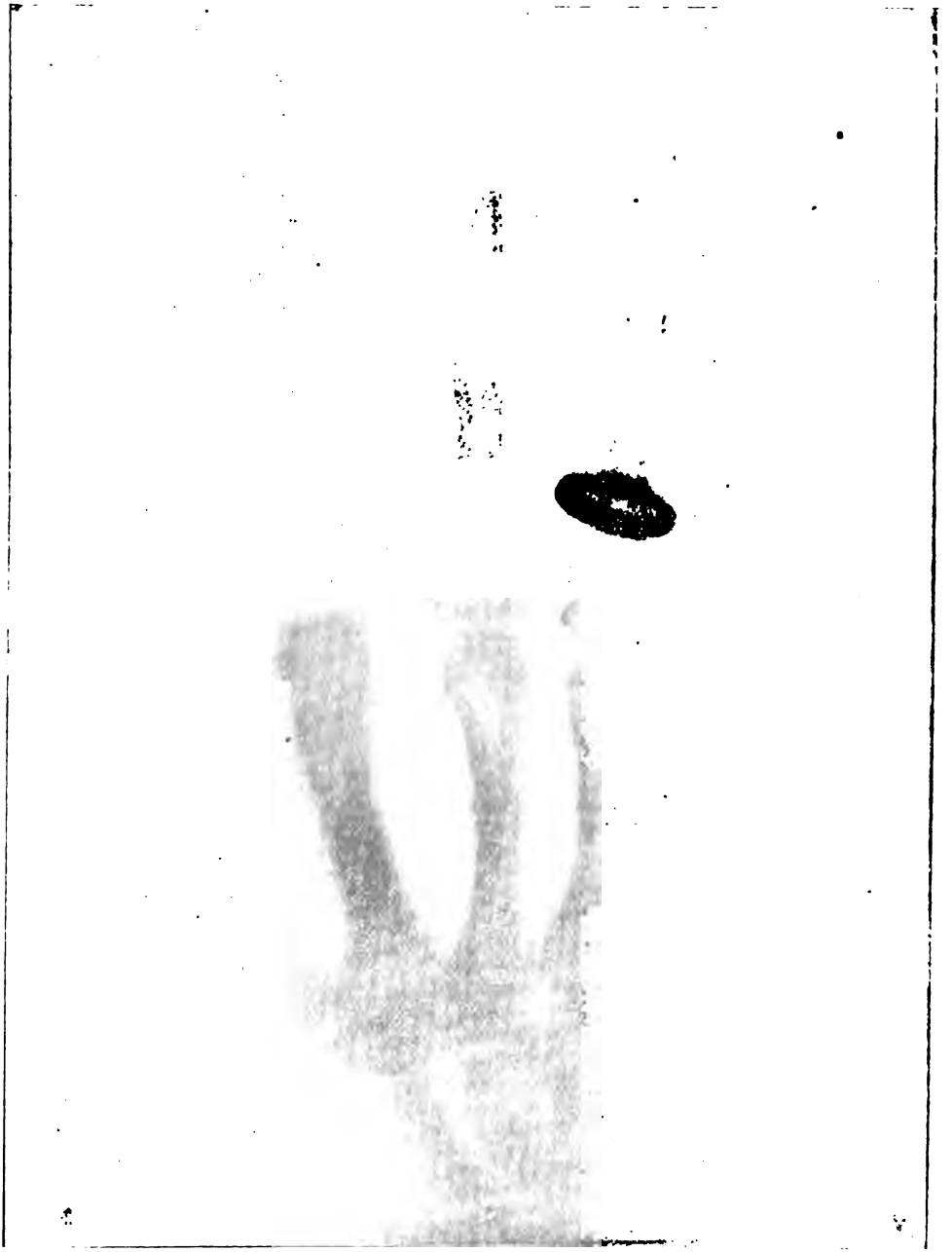
In cases of post-partum hemorrhage, says Dr. McNeill, the treatment by transfusion, or sterilized intravenous saline solutios, has long received well-merited attention.

He believed, however, that the value of voluminous intestinal enemata of warm water and salt in such cases insufficiently appreciated, and that such treatment applies to military and and other surgery, as well as to obstetric practice. But, he says, to be effectual, the tube must penetrate the sigmoid flexure and command the absorptive powers of the descending, transverse, and ascending colon; therefore, a long tube must be used, and the injection pushed to tension limits.

The old pathological axiom that powers of absorption are in inverse ration to powers of pressure comes into force in an astonishing manner in the case of a depleted arterial system, as the foregoing case illustrates,

Dr. McNeill thinks that the absorptive capacity of the large intestine has not been sufficiently recognized as an alternative (on the spur of the moment) to transfusion or intravenous injection. A great many persons, he says, die every year from loss of blood, and if a long enema tube should prove to be a fair substitute for an expensive and troublesome transfusion apparatus, a rather important departure in surgery has been made.

He has no doubt whatever, he says, that the voluminous in-



**Living Hand taken January 17, 1896, with Professor Rotengen's X Rays, in the Physical Laboratory at Hamburg, Germany.**

The plate at the time of taking was in a closed plate-holder, so that the rays passed through the hand and the wooden cover.

duced from *New York Medical Record*, Feb. 15th, by University Press Co., of Nashville, Tenn.

jection saved the patient in this case, and, as evidence, he states that none of the large quantity of water was ever seen again. None was returned. In two days she had a solid evacuation, but all that gallon or so must have been absorbed into her circulation in a very short time, and aided by artificial respiration, set her heart going again.—*N. Y. Med. Journal.*

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

# Editorial.

## THE ROENTGEN PROCESS—THE CATHODE OR X RAYS.

In the early part of the initial month of this year, the startling intelligence was transmitted to this country, by means of that wonderful force, electricity, yet in its infancy, and with a speed that annihilates time, even though passing underneath the waves of the mighty ocean, that Professor Roentgen, of Bavaria, had discovered in certain rays of light a capital potency, the existence of which has heretofore been unknown. Professor Roentgen maintaining that, "these rays penetrate organic matter and other opaque substances just as ordinary rays penetrate glass."

This wonder of the closing decade of the nineteenth century was foreshadowed in this city seventeen years ago by the late Dr. L. C. Garland, at that time Chancellor of Vanderbilt University. The very reverend and eminent scientist elaborately discussed the subject at the University in 1879, in a lecture, we are informed by Dr. Walter F. Boggess, of 308 West Chestnut Street, Louisville, Kentucky, who took copious notes of the lecture, and it was from these that he has recently prepared the following statement:

"The old saw, that 'nothing is new,' is verified in regard to this new light of which so much is written since Roentgen's discovery of its use in photography. In 1879 and 1880, when a student at Vanderbilt University, of Nashville, Tenn., the late venerable Dr. Landon C. Garland, one of the most learned, painstaking and advanced physicists in America, exhibited before his class in a series of elaborate lectures the Crookes tubes with the so-called 'radiant matter,' and explained the new phenomena as a

new form of ether. Dr. Garland had, possibly, the most complete outfit of these tubes in America, the apparatus costing several thousand dollars, with the so-called Geisler tubes. The tubes were of glass of various shapes and sizes, in which a so-called vacuum was produced to the millionth part of one atmosphere.

He also exhibited the resistance that various forms of ether, gases and metals offered to the rays. He predicted that these experiments and this new etherial medium would revolutionize our theories of light, and every alumnus who had the pleasure of hearing these elaborate lectures will bear me out when I say that he also predicted that these rays would also be used in photography at some future date. Thus, it is a wise man of the past predicted the so-called discovery of the future, and I, an alumnus of the university, do him honor in that knowledge.

As to the use of this new discovery in medicine, I can only say that I am inclined to think that too much will be claimed for it at first, as is the case with all new discoveries. The physician is, by nature and training, an enthusiast and a theorist."

From the *Scientific American* of February 1st, ult., we extract the following:

"Full reports of Prof. Roentgen's discovery have not yet reached us, and the accounts so far received do not greatly clarify the atmosphere surrounding his discovery. The effects are said to have been produced by Crookes tubes as the source of light or of ethereal disturbance. The active cause, whatever it is, it is said, was incapable of refraction, at least by an ordinary photographic lens. The discovery is described as having been made by accident. Prof. Roentgen was experimenting with a Crookes tube covered with cloth. Some sensitized paper lay near it, and the paper showed next day some streaks of coloration. This appearing mysterious, Prof. Roentgen repeated what he had done and traced the cause to the tube, and so went on to prove that he could get actinic effects from an active Crookes tube through a screen, generally made of organic matter, and one opaque to light, although one account says that the effect can be produced through a plate of aluminum over half an inch thick. Another statement is to the effect that the rays are not undulatory, but move forward in straight lines.

This statement suggests an attempt to draw an analogy between what goes on inside a Crookes tube with the molecules of extremely rarefied air therein and what is supposed to go on in the space between the tube and the sensitized surface. Nine examples of the photographs are said to be in Vienna, sent there from Wurzburg. The Crookes tube, it appears, is placed behind the object to be experimented, and the photography thus appears as shadow photography, or a species of printing similar to contact printing."

From the succeeding issue of the *Scientific American*, the grandest periodical published on this continent, that of February 8th, we make this additional extract:

"The now famous Roentgen's discovery has been still further described, the accounts have assumed better shape, and his experiments have been repeated in this country by some of our leading physicists. It was on January 4th, at the celebration of the semi-centennial of the founding of the Berlin Physical Society, that Prof. Roentgen described his discovery, which had been accomplished only a few days before, detailing his results and presenting proofs of his photographs. The paper covered substantially the grounds gone over by us in our last issue. The rays eminating from the cathode of a Crookes tube were used, and in their new role were named "X Strahlen," or "X rays." Prof. Roentgen advanced the theory that the rays are due to the propagation of longitudinal ether waves, analogous in type to sound waves, only differing in their medium or material.

Prof. Philip Lenard, of the University of Bonn, had published two papers in Wiedemann's Annalen, one in January, 1894, and one in October, 1895, showing how the cathode rays could readily pass through aluminum. While the course of the rays passing through aluminum was investigated by him, principally with the aid of fluorescence, he used also sensitised photographic plates. He obtained results closely approximating those of Prof. Roentgen.

Prof. A. W. Wright, of Yale University, occupying the chair of experimental physics and director of the Sloan Physical Laboratory, tried the cathode ray photography with much success. He got prints of various objects through opaque screens. One point brought out is, that while it is distinctly shadow photography, it is so with a difference—it is not merely silhouettes that are imprinted. The effect of the rays upon the photographic plate varies with the nature and thickness of the object through which they pass, so that some representation of its contour and inner structure can be obtained.

One of Prof. Roentgen's exhibits was the photograph of a skeleton of a hand taken from the living hand, the point being that the bones produced a denser 'shadow' than did the flesh. (See full-page illustration.) This differential action has enabled an aluminum medal to give an image showing its lettering and design. An attempt to take the skeleton of the hand at Yale resulted, it is said, less favorably than with Prof. Roentgen. Prof. Wright's other results were most satisfactory. He found that glass was more opaque than was ebonite, that aluminum was more transparent than other metals, and his photographs are very interesting and quite numerous.

At Harvard University, Prof. Trowbridge, Director of the Jefferson Physical Laboratory, also obtained cathode ray photographs. He is said to have used an exceedingly powerful excitation, enough to give a six inch spark through air; probably a lesser power would answer.

The effects of the new discovery upon medicine and surgery in the diagnosing of disease have been much insisted on, and a recent dispatch from Vienna states that Dr. Neusser, of the Vienna University, has suc-

ceeded in detecting calcareous deposits in the internal organs of a patient by the cathode rays.

The rays have been proved incapable of refraction or polarization, and their nature and constitution affords a most difficult problem to deal with—one whose solution may greatly modify our views of radiant energy and of luminiferous ether, and hence of cosmic questions of the utmost magnitude."

During the month of February, the daily newspapers as well as the scientific periodicals have been teeming with articles bearing upon this wonderful process, which briefly stated is, that by passing an electrical current from an induction coil, though a Crookes tube, certain rays of light, designated as X rays, having the additional qualities of phosphorescence and fluorescence are transmitted through certain substances that were formerly regarded as opaque, such as ebonite, vulcanized fibre, wood, cardboard, leather, slate, the soft tissues of the living or dead body, while ordinary glass and some inorganic substances and some metals obstruct the rays.

A great many people who have not attended school recently may like to refresh their memories in regard to the nature and uses of the Crookes

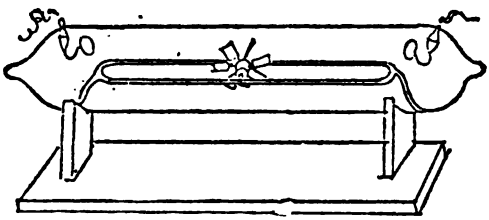

FIG. 1.—Simple Form of a Crookes Tube, Showing Mechanical Effects.

tube, a piece of laboratory apparatus brought into prominence by Prof. Roentgen's recent discoveries. In order to study the behavior of electricity when passing through gases of various densities scientific men have for years been using a glass tube, closed at the ends, into which were inserted the ends of electric wires. Often these terminals or electrodes, were provided with a thin disc of platinum, aluminum or other metal; and the current of electricity entered by the positive wire, leaped across the long gap, and departed by the negative wire. Even when the contents of the tube were almost entirely exhausted the peculiar and beautifully stratified radiance obtained proceeded chiefly from the "anode," or positive, terminal.

But with a still higher vacuum a new radiance resulted, and this emanated from the negative terminal or cathode. The cathode rays were perceptible sometimes when the other kind of illumination was visible; but it was possible to get rid of light from the anode entirely, and thus render possible a more elaborate scrutiny of the effects produced by the negative pole. It might be remarked, in passing, that the current em-

ployed in such experiments was not taken direct from a frictional machine, a galvanic battery nor a dynamo, but, whatever the source, the electricity was first sent through an induction coil, and the secondary circuit of the latter was connected to the tube. This enabled the sparks to leap a much greater distance than would otherwise be possible. William Crookes was one of the most active investigators of the properties of the cathode rays, and therefore the tube in which high vacuum experiments were conducted was named after him.

The first effect which was noticed was a faint phosphorescent glow in the interior of the tube when the current was sent through it. Crookes proved that this came from the cathode and that it was caused by straight rays by introducing a Maltese cross into the tube so that it would cast a shadow. He also found, on arranging a delicate paddlewheel in the tube in a suitable position, that this object would rotate, as if impelled by a force emitted by the cathode. This fact, taken with some others, led him

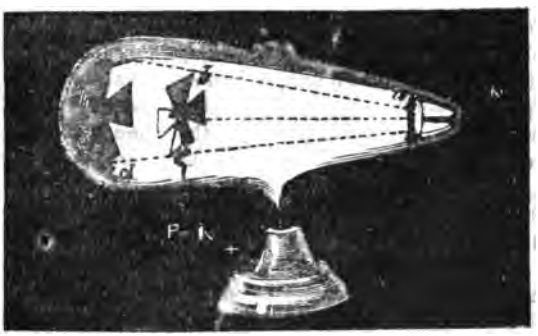


FIG 2.—Crookes Tube Showing Shadow, Reproduced from *Scientific American*, Feb. 15th, by University Press Engraving Company.

to believe that molecules of the gas remaining in the tube, after being electrified were shot away from the negative electrode with great velocity, and excited the strange luminous glow by bombarding the glass. If, however, they came into collision with each other before striking the glass, they would grow self-luminous. This seemed to strengthen Crooke's own theory, which has been accepted by some other scientists, that the cathode rays are particles of matter violently propelled. Still, it is not clear how such particles can pass through solid materials. A class of optical phenomena called flourescence has given rise to another explanation. It has long been known that some substances, like solutions of sulphate of quinine, and of æsculine, are colorless when light shines through them, but assumes a beautiful blue of greenish hue when light falls on their surface. Such substances are supposed to possess the power of suppressing or changing what are called the "ultra-violet" rays of the spectrum, vibrations closely akin to light, but of wave-lengths too short to permit

them to be visible. Now, certain high vaccum tubes have been made of a kind of glass possessing this curious fluorescent quality. As they exhibit a strong blue or green tinge not found in ordinary tubes, it was suspected by Leonard and others that the exciting influence, the cathode ray, in fact, is an invisible form of energy, identical with or very similar to the "ultra-violet" radiation in sunlight, and hence merely a vibration of the ether at a rate too rapid to produce what we call light. According to this new theory, it is not matter, but a particular class of ether waves that does the business. The late Heinrich Hertz is said to have taken this view, and Roentgen is quoted as expressing a similar suspicion. Perhaps an experiment made in London two or three weeks ago by Campbell Swinton may have some bearing on this point. He interposed between a Crookes tube and a photographic plate an aluminum tray containing an alum solution. This made an impression. He then tried a fresh photographic plate and an iodine solution, and obtained no image. Aluminum is transparent to the rays in question, and so it was the liquid and not the metal which was photographed in the first instance. This showed that the iodine absorbed some rays that passed through alum freely. Iodine is now known to be a fluorescent substance.

One puzzling conflict of testimony relates to the effect of a magnet held near the tube. Crookes found that the magnet would, according to circumstances, obstruct or promote the phosphorescent effect which he obtained, and which he believed to be due to the bombardment of the glass by the molecules of gas. But Roentgen is reported as saying that a magnet does not influence the rays which produces his remarkable photographs. It remains for the experts to reconcile these statements; but it is possible that two distinct agencies are simultaneously brought into action, one causing the effects observed inside the tube, and the other giving additional effects outside.

Several years ago Hertz studied a set of waves that were excited in ether and moved out sideways from an electric conductor in which exceedingly rapid oscillations of current were occurring. These were called "transverse" or "electro-magnetic" waves; and Hertz found that these would penetrate many substances which were opaque to ordinary electricity. He made no photographic discovery, though.

But another class of waves have been excited in the ether by what is called "electrostatic" action. These travel straight ahead from a conductor, and not transversely, like the electro-magnetic waves. Tesla has conducted many interesting experiments with these. With these "thrusts" or waves he has obtained a beautiful glow in an exhausted glass bulb or tube, to which one terminal of an induction coil was presented. Thomas Commerford Martin mentioned the phenomena in *The Century* for last April. Possibly these waves may prove identical with the influence proceeding from a Crookes tube. Tesla, Hertz and Leonard had found that these straight-ahead ether waves would penetrate thin films of aluminum, but it was left to Roentgen to detect their actinic or chemical properties, on which photography depends.

Prof. A. W. Wright, of ths Yale University, used a Crookes tube of the accompanying form (Fig. 3):

On a clamp support is carried the Crookes tube, one of appropriately spherical shape of the type originally used by Prof. Crookes to show the dependence upon the negative pole of radiant state phenomena. The tube was experimented with in two positions, the plate or one of the wires being made the cathode, the bulb being always so placed as to keep the cathode uppermost.

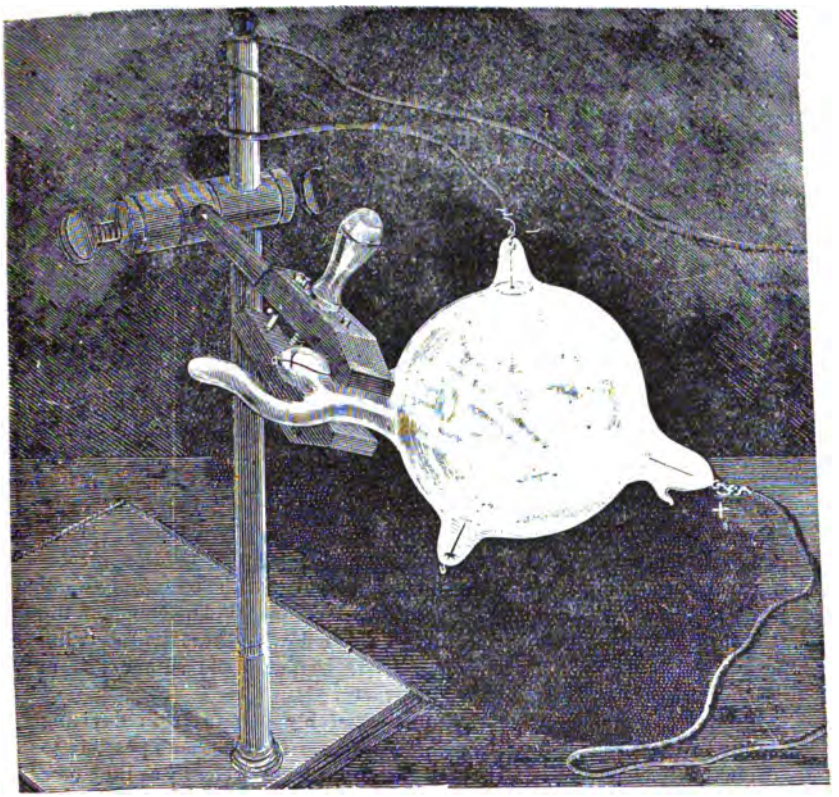

FIG. 3.—Crookes Tube Used by Prof. A. W. Wright. Reproduced from the *Scientific American* by University Press Engraving Company.

The excitation was furnished by an induction coil, the primary of which was excited by a five-cell storage battery and the secondary was taken as giving 200,000 to 300,000 volts potential, corresponding roughly to a spark length or distance between electrodes of two or three inches in air. Wires from the secondary were connected to the terminal of the Crookes tube as shown, the negative wire to the upper electrode.

On the table a few inches below the tube, the sensitized plate contained in an ordinary plate holder was placed, and on its slide of ebonite were placed the objects to be photographed.

It is some eighteen years since Crookes tubes were prominently brought into service. They are simply tubes or vessels of thin glass into whose walls platinum wire electrodes are sealed hermetically and which are then exhausted to a very high degree, to about one millionth of an atmosphere. The tubes are of different shapes, to enable different experiments to be performed with them.

As to what will be the outcome of this discovery, it is yet impossible to say; as it will take time and further experimentation to fully develop its already wondorful resources. We can not yet accept the optimistic views quoted in the *N. Y. Medical Record*, February 15th, ult., as follows:

"Aside from the use of these 'X' rays in photography, it has been suggested by Mr. Glover Lyon, a correspondent in a recent issue of *The Lancet*, February 1st, that they may be utilized in the destruction of germs inside the body, and notably in connection with the well-known germicidal power of violet rays. Who knows? We may yet be able to throw new light on the tubercle bacillus and give renewed hope to the forlorn consumptive, ever waiting for a new remedy."

The practical use in which the new process has been experimentally and successfully tried are the demonstration of lesions in bone, and the locality and presence of foreign bodies imbedded in the tissues, such as bullets, pieces of glass, etc. If it will only demonstrate accurately the precise locality of a needle imbedded in the tissues, a common and most annoying occurrence in surgical practice, it is a boon indeed. The diagnosis between fracture of a bone and a luxated joint, frequently very trying to the surgeon, will be rendered easy, as will the definite knowledge of the correct adjustment of fragments of bone in fracture. Atheromatous deposits possibly may be detected by this means early enough to prove of material service, Its possibilities are so far beyond anything heretofore suggested that we can only wait with patience for the outcome.

Dr. Henry W. Cattell, Demonstrator of Morbid Anatomy in the University of Pennsylvania has furnished the *Medical News* the following somewhat optimistic sketch of its uses in medicine and surgery, from from which we make the following extracts:

"The surgical imagination can pleasurably lose itself in devising endless applications of this wonderful process. If it becomes possible to drive these mysterious rays through the entire body as clearly as they now penetrate the hand, the realm of utility will be practically boundless. It is stated that stone in the kidney has already been determined; and the opacity of glass has led to the detection of small pieces adherent to bone after accident. The similar opacity of lead may render the probe useless in gunshot wounds, except in rare cases, as when the bullet is buried in bone. A new means of distinguishing luxations from fractures is now added to the long list at our command. Obstetricians will readily perceive the immense value of ability to see the fœtus in utero after ossifica-

tion of its bones has occurred. The representation of deformed pelves in the living subject, of spondylitis, of calcerous infiltration of various parts, such as arteries, and of exostosis—all this opens up a tempting and promising field for practical research.

"The easy application of Roentgen's method of taking a picture on a sensitized plate renders its use at once possible in hospitals. The entire cost of such an apparatus need not exceed $50, and the expenditure of this amount will shortly be materially diminished. Doubtless the scientific and commercial ingenuity now being focused on this process will soon produce outfits at once simple, convenient and portable, and it is safe to say that most practitioners will then provide themselves with the means of seeing into the mysterious recesses of the body, now accessible only by means of the knife."

W. F. Magie, Ph.D., Professor of Physics in Princeton College, N. J., makes the following statement:

"The instrument here proposed for examination with the Roentgen rays I have not seen described elsewhere, and therefore present a brief account of it, in the hope that it will be of use to investigators in this interesting subject.

"A sheet of black paper, coated on one face with platinum-bari cyanide, is placed with the coated side inward across the end of a tube or box, into which the observer looks, and which is so fitted to the face or shielded by cloths that the phosphorescent substances and the eyes are protected from all extraneous light. If this tube be then directed toward the excited Crookes' tube, which is giving the Roentgen rays, the phosporescent paper in the tube glows, and the shadows of objects interposed between it and the Crookes' tube appear upon it. The advantages of this arrangement consists in avoiding the experimental inconvenience of working in a dark room, and likewise, the delays involved in the plan used by Roentgen. By this instrument the phenomena of the Roentgen rays can be most conveniently investigated. Its obvious applicability in diagnosis has led to my giving an account of it here."

How far the various organs of the body can be distinguished, and any abnormal conditions existing therein can be ascertained by cathode photography, is yet uncertain. Dr. Neusse, of Vienna, is said to be meditating an elaborate series of experiments in this direction. The tissues which compose the organs are so much like the muscles in chemical composition, if not in color and function, that much doubt is entertained by medical men on these points and also as to the possibility of studying cancer by the new method. To a certain limited extent the incandescent light has already been used in exploring the human interior, the stomach and face in particular. Lamps of special form are made, too, to throw luminous rays entirely through the human body with a powerful arc light. None of the results thus far obtained in this manner are very satisfactory; but it remains to be seen whether the invisible actinic rays that give the Roentgen photographs can be utilized to any better effect.

## ANNUAL MEETING OF THE TENNESSEE STATE MEDICAL SOCIETY.

The sixty-third annual session will be held in Chattanooga, Tenn., April 14th, 15th and 16th next. The following programme, which may be added to before or during the meeting, is ample evidence that a most enjoyable time may be expected. Every regular medical man in the State should become a member of this grand old organization, and everyone who possibly can should attend the meeting. The usual railroad rates, of one full fare going, and one-third fare returning, on presentation of certificate procured at starting point, endorsed by the Secretary. Be sure and ask for certificate on purchasing ticket.

### PRELIMINARY PROGRAMME.

1. "Fractures at the Upper Extremity of the Radius, with Cases." By Dr. B. B. Cates, Knoxville.

To open discussion—Drs. G. Baxter, Chattanooga, and W. B. Rogers, Memphis.

2. "Diseases of the Accessory Cavities of the Nose." By Dr. G. M. Peavler, Bristol.

To open Discussion—Drs. Frank Trester Smith, Chattanooga, and G. H. Price, Nashville.

3. "Some Observations on the Therapeutic Actions of Ergot." By Dr. W. C. Bilbro, Murfreesbro.

To open discussion—Drs. M. L. Bradley, Saddlersville, and S. S. Duggan, Unionville.

4. "Posterior Urethritis." By Dr. J. W. Handley, Nashville.

To open discussion—Drs. W. F. Glenn, Nashville, and G. W. Seay, Nashville.

5. "Retroflexion of the Uterus, with Report of Cases." By Dr. G. B. Gillespie, Covington.

To open discussion—Drs. R. Douglas, Nashville, and Hazel Padgett, Columbia.

6. "Immediate Amputations." By Dr. T. J. Happel, Trenton.

To open discussion—Drs. Duncan Eve, Nashville, and C. A. Abernathy, Pulaski.

7. "Croup." By Dr. G. W. Moody, Shelbyville.

To open discussion—Drs. J. A. Witherspoon, Nashville, and J. W. Brandeau, Clarksville.

8. "A Review of the Past and Present Pathology and Treatment of Uterine Displacements." By Dr. J. S. Nowlin, Shelbyville.

To open discussion—Drs. W. D. Haggard, Nashville, and W. K. Sheddan, Williamsport.

9. Report of a Case of Neurotic Bladder Trouble, and Subsequent Pyelonephritis, Relieved by Nephrotomy." By Dr. J. B. F. Dice, Morristown.

To open discussion—Drs. J. W. Handley, Nashville, and W. K. Vance, Bristol.

10. "Gastric Dyspepsia." Dr. K. S. Howlett, Bigbyville.

To open discussion—Drs. J. S. Cain, Nashville, and J. A. Crook, Jackson.

11. "The Use of the Bicycle." By Dr. Hazle Padgett, Columbia.

To open discussion—Drs. S. W. Sanford, Union City, and G. D. Hayes, Shelbyville.

12. "Cancer of the Breast." By Dr. S. S. Crockett, Nashville.

To open discussion—Drs. J. R. Buist, Nashville, and G. W. Drake, Chattanooga.

13. "Professional Fads and Faddists." By Dr. W. K. Sheddan, Williamsport.

To open discussion—Drs. N. T. Dulaney, Bristol, and J. B. Cowan, Tullahoma.

14. "Constipation." By Dr. S. T. Hardison, Lewisburg.

To open discussion—Drs J. S. Nowlin, Shelbyville, and K. S. Howlett, Bigbyville.

15. "Fissura in Ano." By Dr. A. B. Cooke, Nashville.

To open discussion—Drs. J. L. Watkins, Nashville, and C. Holtzclaw, Chattanooga.

16. "The Germ Theory of Disease." By Dr. C. M. Sebastian, Martin.

To open discussion—Drs. H. Berlin, Chattanooga, and Larkin Smith, Nashville.

17. "Sprained Ankles." By Dr. J. L. Crook, Jackson.

To open discussion—Drs. S. S. Briggs, Nashville, and C. L. Lewis, Nashville.

18. "Mastoid Diseases." By Dr. N. C. Steele, Chattanooga.

To open discussion—Drs. L. B. Graddy, Nashville, and G. M. Peavler, Bristol.

19. "Medio-Bilateral Lithotomy." By Dr. C. S. Briggs, Nashville.

To open discussion—Drs. Paul F. Eve, Nashville, and B. B. Cates, Knoxville.

20. "Repair of Round Ligament of the Uterus vs. Production of Artificial Ones." By Dr. M. C. McGannon, Nashville.

To open discussion—Drs. T. J. Crofford, Memphis, and G. B. Gillespie, Covington.

21. "The Rational Treatment of Typhoid Fever." By Dr. J. A. Crook, Jackson.

To open discussion—Drs. A. M. Trawick, Nashville, and T. R. Moss, Dyersburg.

22. "Surgical Operations in the Aged." By. Dr. C. A. Abernathy, Pulaski.

To open discussion—Drs. J. B. Murfree, Murfreesboro, and R. J. McFall, Cumberland City.

23. Anomalies of the Umbilical Cord." By Dr. W. S. Scott, Dickson.

To open discussion—Drs. J. Bunyan Stephens, Nashville, and H. J. Warmuth, Smyrna.

24. "Cæsarean Section." By Dr. R. Douglas, Nashville.

To open discussion—Drs. W. G. Bogart, Chattanooga, and C. E. Biscine, Knoxville.

25. "The Art and Mystery of Medicine." By Dr. B. D. Bosworth, Knoxville.

To open discussion—Drs. G. W. Moody, Shelbyville, and C. M. Sebastian, Martin.

26. "Surgery of the Pancreas." By Dr. Paul F. Eve, Nashville.

To open discussion—Drs. C. S. Briggs, Nashville, and J. W. Hill, Knoxville.

27. "Hypertrophy of the Prostate." By Dr. W. F. Glenn, Nashville.

To open discussion—Drs. J. B. F. Dice, Morristown, and J. L. Crook, Jackson.

28. "The Importance of Complete Post Partum Uterine Contractions, for the Safety of the Mother." By Dr. J. R. Buist, Nashville.

To open discussion—Drs. M. C. McGannon, Nashville, and C. W. Womack, Chapel Hill.

29. "Treatment of Injuries of the Brain." By Dr. D. Y. Winston, Clarksville.

To open discussion—Drs. L. P. Barbour, Tullahoma, and T. C. Murrel, Winchester.

30. "Report of a Case of Gall Stones." By Dr. T. R. Moss, Dyersburg.

To open discussion—Drs. A. J. Swaney, Gallatin, and I. A. McSwain, Paris.

31. "Pernicious Malarial Fever." By Dr. C. W. Womack, Chapel Hill.

To open discussion—Drs. W. C. Bilbro, Murfreesboro, and W. S. Scott, Dickson.

32. "Treatment of Hæmorrhoids." By Dr. H. R. Coston, Fayetteville.

To open discussion—Drs. A. B. Cooke, Nashville, and C. Brower, Nashville.

33. "Vaginal Hysterectomy." By Dr. T. J. Crofford, Memphis.

To open discussion—Drs. R. Douglas, Nashville, and M. C. McGannon, Nashville.

34. "Sciatica." By Dr. R. J. McFall, Cumberland City.

To open discussion—Drs. W. A. H. Coop, Lawrenceburg, and W. A. Atchison, Nashville.

35. "The History of a Lawsuit." By Dr. C. Holtzclaw, Chattanooga.

To open discussion—Drs. D. E. Nelson, Chattanooga, and E. L. Deaderick, Knoxville.

Presidential Address.—Dr. G. C. Savage. "Medical Progress; Its Helps and Hinderances."

## SUBSTITUTION.

In response to the article in the December 1895 number of this journal, requesting our readers to give the information wherever and whenever they were satisfied that a druggist was *substituting* another preparation for one that had been prescribed, we have received from an authentic source, with satisfactory guarantee as to correctness, that the following druggists had been resorting to this miserable and most reprehensible practice:

Stegner Drug Co., Cor. Grand and Easton Aves., St. Louis; J. W. Crain, 75 West Madison Ave., Chicago; International Pharmacy, 422 S. Clark St., Chicago; Merz Bros., S. W. Cor. 12th and Ogden Ave., Chicago; Richard Jentzsch, 12th and Ogden, Chicago; Stolz and Grady, 104 North Clark Ave., Chicago; Chas. H. Schad, 344 E. Washington St., Indianapolis; Chas. S. Hayer, Fifth Ave. and York St., Louisville; E. Kampfmueller, Seventh and Broadway, Louisville.

This is a small list so far, and we would be glad indeed if it were smaller; but if other names are furnished by reliable authority, we shall continue the publication from to time until the wretched and fraudulent practice is no longer known in the land, even though it may take additional supplementary pages or numbers of this journal to contain the names of such harpies, who risk the lives of our people and the reputation of our physicians for sordid gain.

It should be made a criminal offense in every land, and until such may be accomplished we can feel it but our duty as medical journalists to resort to the most active efforts of moral force to put an end to it.

The following letter is only one of many instances of far too frequent occurrence, and is only one of the many methods of substituting, which the medical profession and the general public ought to know.

Dr. C. F. Tucker, of Syracurse, N, Y., January 9th, 1896 writes:

"Some time ago when I was doing a country practice at Jordan, Onondago Co., N. Y., I wrote Messrs. Battle & Co. that I could not get the uniform results from Bromidia that I had previously. They sent me a 4-ounce sample, and that was all right, and I still have on hand a little of that particular sample.

The party who had dispensed my prescriptions, after I had expressed my opinion very strong, confessed that *he had purchased a considerable quantity af a Mixture at a less price, said to contain exactly the same ingredients, and had been dispensing that when Bromidia was prescribed.*

After that I had no more trouble, and I can truthfully say that you can find it in my emergency case, office, and in my regular "grip" always, and I have never seen anything but perfect satisfaction attending its use, and I have given it to patients of all ages and about every condition.

I have used it in the last stages of pulmonary tuberculosis, and in severe cases of chronic bronchitis, in delirium tremens, etc., and I always use it when I want a certain hypnotic.

I have used it in doses from two minims to two and 3 drachms. It is one of the mixtures of so called treacherous chloral that has never, thus far, caused alarm. I have been familiar with Bromidia since away back in the '80s when I was a clerk in a drug store, and since I have been practicing I still regard it as a reliable old friend, and so it has proved on many occasions."

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TROMMER EXTRACT OF MALT WITH COD LIVER OIL.—A palatable, stable and efficient combination, consisting of sixty per cent. of Extract of Malt and forty per cent. (by volume) of Norwegian Cod Liver Oil.

This, the most desirable preparation of Cod Liver Oil yet offered, supplies a much felt want by enabling physicians to extend the use of the Oil to all cases in which it is indicated, combined with a substance that increases its efficacy by making it easily digestible, and acceptable to the most delicate stomach.

The properties possessed by Trommer Extract of Malt of transforming unassimilable food into that which may be easily assimilated, of furnishing phosphates to the system, of being itself bland and nutritious, and of forming also an unequaled combination with Cod Liver Oil, sufficiently attest the appropriateness of the combination.

Unlike any of the bulky emulsions proposed with the object of masking the peculiar flavor of the oil, in this combination are found but two substances, and these of almost equal value in the treatment of the same class of diseases.

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THE DECADENCE OF OPIUM.—Wendell Reber, A.M., M.D., Pottsville, Pa., Oculist and Aurist to the Children's Home, under the above caption in the *Buffalo Medical Journal*, writes: "We would not banish opium. Far from it. There are times when it becomes our refuge. But we would restrict it to its proper sphere.

"In the acute stage of most inflammations, and in the closing painful phases of some few chronic disorders, opium in galenic or alkaloidal derivatives, is our grandest remedy—our confidential friend. But here, the application should cease; and it is just here that the synthetic products step in to claim their share in the domain of therapy.

"Among the latter, perhaps none has met with so grateful a reception as antikamnia, and justly so; for among all the contributions of pharmaceutic chemistry, none so fully merits our confidence as this one.

"Given a frontal-temporal-vertical or occipatal neuralgia growing out of an uncorrected ocular defect, it will almost invariably arrest the head pain, until such time as the ocular trouble can be corrected with glasses. In the terrific fronto-parietal neuralgia of glaucoma, or in rheumatic or post-operative iritis, it is of signal service, contributing much to the comfort of the patient; and, I have sometimes thought, exerting an

undeniable influence over the ocular disease. In this last group of cases I have seen the most benign effects follow the hourly administration of ten grains of antikamnia until the pain is relieved. It will seldom be necessary to exceed sixty grains of the drug.

"Its range of application is wide. It is of positive value in certain forms of dysmenorrhœa; it has served me well in the pleuritic pains of advancing pneumonia, and in the arthralgias of acute rheumatism; on several occasions, I have been able to allay with it the lightning, lancinating pains af locomotor ataxia; but nowhere do I employ it with such confidence as in the neuralgias, limited to the area of distribution of the fifth nerve. Here its action is almost specific, surpassing even the effect over this nerve."

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Creasote.—The value of Creasote in Phthisis is now fully recognized, but its repulsive taste and odor, and the derangement of digestion which it causes, have proved objections to its general use.

Maltine with Cod Liver Oil effectually disguises the disagreeable taste and odor, obviates regurgitation or derangement of digestion, retains fully the virtues of the Creasote, and forms a valuable adjunct by reason of its reconstructive and digestive properties.

The following formula has been employed with most gratifying results, and is submitted with the conviction that it will prove a useful suggestion to physicians seeking a satisfactory method of administering this drug:

| | |
|---|---|
| Maltine with Cod-Liver Oil | 16f ℥ |
| Beech Wood Creasote | 2f ℥ |
| Oil of Lemon | 12m |
| Oil of Bitter Almonds | 8 m |

The proportion of Creasote can, of course, be increased or decreased if desired.

When vigorously triturated, the Maltine with Cod Liver Oil being added to the creasote gradually the incorporation will be perfect and the mixture will keep for a long time. It can be given in tablespoonful doses in water, milk, wine, spirits, etc., or it can be taken clear. If for any reason the Cod Liver Oil is not desired, "Maltine Plain" can be substituted, but the incorporation will not be so perfect. The creosotal or creosote carbonate, which we prefer, can be used in the same way, increasing the dose from day to day as needed.

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Acute Rheumatism.—"In summing up the testimony, it is clear to be seen that the salicylates are a most valuable remedy in acute rheumatism as well as some of the chronic forms. As a matter of fact, the beneficial results obtained is something like 71.8 per cent. In two cases, one

of which was acute and the other that might be classified in the subacute stage, I received the gratifying results in the preparation known as Tongaline. There seems to be in this preparation just enough of the salicylates to have the desired effect upon the disease proper, and yet produce little effect on the circulation. It is a well known fact that when the salicylates are thrown into the veins, the effect is to increase the energy of the systolic contractions, the number of pulsations and the blood pressure. It seems that under the influence of increasing doses, the vessels dilate, the blood pressure falls and finally the heart is arrested. On the resume of the use of the salicylates I am led to believe that the heart lesions which follow rheumatism can be traced more pointedly to the toxic doses of the salicylates than the disease itself. But the preparations, which I have heretofore mentioned, combined with its other ingredients, fail to produce those distressing and disagreeable features which doubtless many of you have encountered."—Extract from an article on "Rheumatism, its Pathology and Treatment," read before the Lucas County Medical Association, Dec. 14th, 1895, by R. H. Timpany, M.D., Toledo, Ohio, in February number *American Medical Compend.*

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ACCURATE ADMINISTRATION OF LITHIA.—Wm. R. Warner & Co.'s original Lithia Water Tablets (3 and 5 grains) admit of an accurate dosage of Lithia not to be obtained in any natural Lithia Water.

These tablets are securely packed so as to maintain their permanency, in consequence of which, when a Lithia Water Tablet is placed in a glass of water it quickly dissolves, effervescing in so lively a manner as to excite the interest of the patient to such a degree, that the unpleasant thought that he is about to take a medicine, does not arise. Now that Lithia has become a valuable remedy for Rheumatism, Lithemia, Gout, Gravel, Bright's Disease, etc., these tablets are without doubt the most convenient method to administer it, as enough Lithia Water Tablets may be carried in the pocket to make 2½ gallons Lithia Water of definite strength.

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"WITHIN the last month or two we have used the *Wine of American Ash*, from the well-known firm of Theodore Metcalf Co., quite extensively in menstrual irregularities, such as inflammation, leucorrhœa, etc., with very satisfactory results. The surgical craze in the treatment of diseases of the female pelvic organs has prevented, perhaps, many of our best physicians from studying as carefully as they should, the medical side of the question. Dr. Skene's recent work on 'Medical Gynecology' will, no doubt, do much to bring the pendulum back to a happy medium. Along with the Wine of Ash, especially in the poorly nourished patients, we have used with great benefit, *Burnett's Cod Liver Oil*, one of the best preparations on the market."—*The Denver Medical Times*, May 1895.

NEUROSINE.—The most powerful Neurotic attainable, Anodyne and Hypnotic. A reliable and trustworthy remedy for the relief of Hysteria, Epilepsy, Neurasthenia, Mania, Chorea, Uterine Congestion, Migraine, Neuralgia, and all Convulsive and Reflex Neuroses. The remedy par excellence in Restlessness of Fevers, producing natural sleep. Composition, chemically pure Bromides of Potassium, Sodium and Ammonium, Zinc, Extract Belladonna, Cannabis Indica and Cascara Sagrada with Aromatic Elixirs. The medicinal effects of which the profession are well acquainted.

CHEMICAL FOOD is a mixture of Phosphoric Acid and Phosphates, the value of which Physicians seem to have lost sight of to some exten n the past few years. The Robinson-Pettet Co., to whose advertisement we refer our readers, have placed upon the market a much improved form of this compound, "Robinson's Phosphoric Elixir." Its superiority consists in its uniform composition and high degree of palatability.

# Reviews and Book Notices.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by THOMAS L. STEDMAN, M.D., New York City. In Twenty Volumes. Volume VI. Diseases of the Respiratory Organs. New York: WILLIAM WOOD & COMPANY. 1895.

The sixth volume of this standard work appears with the regularity that has come to be regarded as one of its characteristic and welcome features, and is now before us, keeping fully up with the high standard of excellence of the preceding four handsome volumes. It was found necessary to print this volume before the fifth by reason of delay in the receipt of manuscript, but the fifth volume, that on "Diseases of the Skin," will appear next in order.

The present volume is devoted first to the "*Diseases of the Respiratory Tract*," which are treated of in a very complete and satisfactory manner. This is from the pen of Dr. Prosser James, of London, the possessor of a graceful literary style, who has given us one of the most readable articles in the book. Following this is an article on the "Diseases of the Accessory Sinuses of

the Nose," by Dr. Jonathan Wright, of Brooklyn. Two articles, one on "Diseases of the Naso-Pharynx" and the other on the "Diseases of the Tonsils," are by Dr, E. J. Moure, of Bordeaux, who is recognized as the leading French authority on affections of the upper air passages. Dr. A. H. Buck, of New York, treats of "Diseases of the Ears" in his usual clear and easy style. Proceeding downward, we come to the "Larynx," the diseases of which are handled in a very satisfactory manner by Dr. F. H. Bosworth, of New York. All of the affections of the upper air passages just mentioned are treated from the point of view of the general practitioner rather than from that of the specialist. Sir Thomas Grainger Stewart and Dr. George A. Gibson, of Edinburgh, have written in collaboration upon the "Diseases of the Trachea and Bronchial Tubes," the result of their combined labors being an excellent treatise on the pathology and treatment of these harassing complaints. The author of the concluding article is Dr. Winslow Anderson, of San Francisco. His subject is the "Diseases of the Lungs," except Tuberculosis and Croupous Pneumonia, two affections which will be considered in a later volume along with the other infectious diseases.

As regards both the interest of the subjects here treated and the authority of the writers, this volume will compare favorably with any medical works before the medical profession.

THE YEAR-BOOK OF TREATMENT FOR 1896. A Critical Review for Practitioners of Medicine and Surgery. 12mo., 484 pages. Cloth, $1.50. Philadelphia, LEA BROTHERS & Co., Publishers. 1896.

Every practitioner will readily appreciate the especial value of a work which summarizes a year's advances in all departments of medicine and surgery, and presents them in classified form for ready assimilation or quick reference. Twelve issues of this Year-Book attest its usefulness and popularity. Prepared by a corps of twenty-six editors, each eminent in his assigned department, the volume can be trusted as at once thorough and authoritative. It closes with a classified list of the best new books, a section on Medical Instruments and Surgical Appliances; Pharmaceutical and Dietetic Novelties, and an Index of Subjects placing anything in the volume instantly at your command.

# THE SOUTHERN PRACTITIONER.

AN INDEPENDENT MONTHLY JOURNAL,

DEVOTED TO MEDICINE AND SURGERY.

SUBSCRIPTION PRICE, ONE DOLLAR PER YEAR.

*DEERING J. ROBERTS, M.D.,* - - *Editor and Proprietor*

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## Original Communications.

### CHARGE TO THE GRADUATING CLASSES OF THE MEDICAL AND DENTAL DEPARTMENTS OF THE UNIVERSITY OF TENNESSEE, TWENTIETH ANNUAL COMMENCEMENT.*


BY A. P. WARTERFIELD, M.D.,
Professor of Theory and Practice of Medicine aad Clinical Medicine.


GENTLEMEN — Having been chosen by you to give the time-honored charge, and parting benediction, it is with pleasure that I do so. This is an important moment in your lives, and while I would not detain you with an elaborate lecture I desire to impress upon you some facts, and give you some practical suggestions.

You have labored long and well. The quite terrible *green room* has been passed. You are Doctors of Medicine. You have in your possession the untarnished, uncorrupted evidence of our endorsement—our commendation of you to a cordial re-

*Delivered at Vendome Theatre, Friday, March 27, 1896.

ception into the great army of those who work for the good of humanity. Will you preserve these parchments as pure, as stainless and untarnished to the end of your lives as they are at this auspicious time?

*Motive*, the psychological dynamo, which gives impulse to all enterprise whether for good or evil, is the inspiration of the true physician. It is that the blind receive their sight; that the lame walk; that the lepers are cleansed; that the deaf hear; that the poor, whom we have always with us, be comforted.

Such purpose dominating every element in your mental constitution, gentlemen, will leave no place for selfish mercenariness. You will have no time to acquire such knowledge as becomes financiers, or as will enable you to drive sharp bargains, or to snatch from laboring millions the products of honest toil. No, the medical philosopher's hat does not fit the money monger. Nor would it be possible for your hat to be comfortably worn by the devotee to selfish greed. It is not complimentary to the so-called doctor's heart, or medical learning, that he is proficient in the acquirement of wealth. If, therefore, your motive in this holy calling is to gain and hoard wealth, as the men of the world account it, I charge you to surrender these high testimonials now, before they are soiled. Step down and out to a lower plane. Betake yourselves to something more becoming to the mind which seeks its own only, and not another's prosperity and happiness. Nevertheless, the workman is worthy of his hire. Nor is the plowing ox to be muzzled in his toil.

You have a long line of historic precedents prompting you to firmness and indomitable persistence in the work which you have chosen. The intent, so divine, has in all ages given courage to the true medical philosopher. The history of medicine is lost in the distant past. Of its infancy but little is known. Acts of healing are related in the Old Testament. Foot-prints of its existence are in the first geological strata of time and thought.

A system of sanitation, segmentation, quarantine and dietetic regulation was promulgated by Moses 1490 B. C., which has not been greatly improved to this day. The treatment of wounds is described by Homer. The Chinese, in beclouded antiquity, had a practice of medicine. Probably on the day that wicked, selfish Cain made the ground crimson with his brother's blood,

there was an affectionate impulse in the heart of his parents to to stay the flowing stream so cruelly made. The chosen disciple, Luke, was a Doctor of Medicine, and was called the Beloved Physician. The Blessed Master, Our Savior, was never called president, senator or politician, nor railroad magnate, banker, financier or lawyer, but He was a physician.

In fact, it is a fair inference that far back in the *eons* of the past, with the institution of the first molecular organism, endowed with vital affinity and susteptibility, there was, by Divine appointment, inwrought the principle of restorative healing by remedial means.

Hippocrates, 460 B. C., introduced the Theory and Practice of Medicine; in an advanced stage of development. There were schools of thought and treatment. Disease was discussed with remarkable acumen. Bleeding was in daily use; cupping was practised. The properties of opium to an extent known. Eliminants of a violent and irritating character were prescribed. The knowledge of anatomy, however, was only rudimentary. The science of physiology was unknown, and its pretense incorrect and inadequate. His distinguisbing method was the subordination of theory to observation. For this he was the model physician, bas been, and ever will be.

Galen, 500 to 600 years after Hippocrates, became his noted successor. He was in spirit the distinguished follower of Hippocrates. His teaching and practice dominated medical thought for 1500 years; until about the beginning of the 18th century. An elaborate writer: he produced more than an hundred treatises on various subjects. Six of which were on the pulse. As a diagnostician he was often correct, and so clear that he would be accounted authority to-day. The followers of Mohamed, in the 9th century, found the writings of Hippocrates and Galen at Alexandria. With the developments of culture and civilization, made possible by invasion and conquest, their writings came back to Europe with practical additions of great value. Venesection was employed with marked modification. Milder remedies were substituted for the more violent and irritating Rhazes, A. D. 850, gave the first account of small-- description served for five hundred years

Such events as the visits [illegible]

carried off one-fourth of the population of Europe; and of the succeeding epidemic of the sweating sickness, which hung as a dark pall over England from 1485 to 1592, added nothing to the history of therapeutics. That *one* infectious disease, which is yet a menace to manhood and to civilization, and which became prevalent and violent in Europe in 1494, afforded better opportunity for the trial of remedies. John, of Vigo, was the first to use mercurial inunction, except Carpus, who, be it said to his shame, had employed it as a secret remedy. Fumigations were practiced. Perhaps no more important addition has been made to materia medica than mercury in this loathsome disease, with its baneful effects on not only unsuspecting adults but on multitudes of little innocents in the beginning of their lives.

The invention of printing, in A. D. 1492, made general intellectual culture possible. An evidence of the revival of interest in medicine was the reclamation of the practice from the hands of the priests and monks, by Linacre, of England. He founded the Royal College of Physicians in 1518.

The discovery of the circulation of the blood, by Harvey, in 1628, constituted the most important epoch in the history of medicine. We will not forget that he owed his early knowledge of the anatomy of the heart and vessels to Fabricius, and drew his inspiration from the long line of explorers who preceded him. But for the teaching he received at Padua, probably, we would not have heard of him.

I must not detain you to relate the demonstration of the capillaries, by Malpighi; the discovery of the lacteals, by Aselli; the receptaculum chyli and thoracic duct, by Pecquet; or the lymphatics, by Steno, thus laying the foundation by physiology for a real comprehension of disease. Sydenham, called the English Hippocrates, taught that it is the business of the physician to coöperate with nature. His art consists in recognizing the indications presented by the symptoms.

By this method he must be governed, in order to aid in restoring normal equilibrium. As for the physician he says: "All his philosophy consists in following the history of diseases, and in knowing how to employ remedies, which experience has shown to be most efficacious for their cure. At the same time he ought to follow a method which is founded, not on chimerical

speculation, but on a common and natural way of reasoning." The remarkable discovery of Harvey, it is to be noted, was quite barren practically, until the explanation of respiration in 1783 by Lavoisier. The discovery of this vital process in advancing medicine was founded on the no less important discovery by Priestly, viz: That carbonic acid was exhaled, and oxygen absorbed by the lungs. In the mean time Claude Bernard further elucidated the mystery of the circulation by demonstrating the contraction and dilatation of the arterioles, by stimuli applied to the nerves which he denominated, *vaso-motor*. The additional discovery of the regulatory function of the vagus, and sympathetic or ganglionic system by the brothers, Weber, the adjustment of the blood supply to the local demands of the system, for nutrition, secretion, muscular activity and all the processes of life, led the way to the discovery of the lacteals and lymphatics, by Glisson and Wharton, and the minute general histology by Malpighi.

Boerhave, a noted medical philosopher and author in the beginning of the Eighteenth Century seems to have thought that with the discovery of the circulation, the advanced knowledge of botany, alchemy, physics, mechanics, and clinical observation, medicine as a composite science and art, had reached its goal. He was assumptive and imaginative, being a disciple of the Iatro-Mechanical School.

The physiological property of irritability in living tissues, discovered by Haller, and his term for it, *stimulus*, led to another theory of disease, and a return to extravagant bleeding. From this the reaction of the Brownonian doctrine, with the indiscriminate use of so-called stimulants. Again, the organicism of Broussais, attributing everything to a gastro-intestinal inflammation became dominant, and venesection was the universal remedy.

The revelations of the microscope, being *pari pasu*, with chemistry, interpreting the connection between structure and function, medicine reached a point of conservatism. Therapeutics became scientific in proportion as the operation of remedies were referred to physiological laws. Physiology, in turn, was scientific in proportion, as vital actions and processes were referred to chemical laws.

Molecular changes, said to be chemical, but more correctly

vital, underlie and determine the structural changes revealed by the microscope. Every vital action is in a sense a chemical action, by which are developed molecules, out of which, the tissues and complex organs are constructed. Passing by Berzelius, Liebig, and other patient, painstaking and observing experimenters, we see by processes of ingenious delicacy and refinement, toxines and antitoxines are isolated and investigated. What an accomplishment! What a flood of light on the science and art of medicine!! It is the link between physiology, pathology, and therapeutics.

Systematizing the histological discoveries of Schwann and Schleiden, in the cell structures by Bichat, opened the way and laid the foundation for the cellular pathology of Virchow and Paget; especially Vsrchow's new conception of pathological changes published in 1856.

Haller, Magendie, Claude Bernard, Ludwig, Marshall Hall, and Brown Sequard, revealed the functions of the nerve centers. Auenbrugger, Corvisart, and Laennec, introduced physical diagnosis by ausculation and percussion.

Thus, diseases of the chest were brought satisfactorily within the knowledge of the physician. Also, valuable suggestions from a wide field of observation on diseases of other organs. Abnormal circulation caused by various structural lesions of the heart, were investigated and explained. The engorgement of the lungs by back pressure was understood. The hydraulics of the circulation revealed the causes of serous exudations, and other concomitant complications. Passing rich fields of discovery and conquest, opened to us by hosts of laborers, who preceded the brilliant genuius of M. Pasteur, suddenly all eyes are turned to him. He seized upon the great clinical discovery of Jenner, and made it the beginning of bacterial pathology. It was the Roentgen imprint in etiology, anticipated. It revealed the essential cause and suggested a cure for zymotic diseases.

Pasteur's discovery led Joseph Lister to the unexpected and practically valuable application of aseptic methods in surgical procedures.

Again, Koch, in 1882, separated and demonstrated the cause of tuberculosis, which destroys more lives than war, famine and pestilence combined. We believe his investigations and discov-

eries are in the direction of an antitoxine, which may expel this fearful enemy from the earth.

Vaccination is the illustration of attenuated virus, by the virtue of which, multitudes we trust, will be made immune from bacterial or infectious diseases.

Time would fail us to recount the brilliant achievements of the great names which need not monuments of stone to render their names immortal. Ephriam McDowell, a country doctor, devised and did an operation which has saved thousands of lives, and brought happiness to numberless homes. J. Marion Sims, not less worthy, will live in the affections of pure womanhood as long as time shall last. What graditude or mead of praise is due to the discoverer of anæsthesia?

Before 1846 surgery was little less than cruelty. When the knife was used it was attended by the screams of the patient, the sobs and tears of sympathizing ones, while the suffering was equaled only by horrible torture.

The great German scientist, Helmholtz, in 1861, by logical inductions based on the laws of mathematics and physics gave us the opthalmoscope, by which the interior of the living eye may be illuminated, diseases diagnosed, and multitudes restored to health, and saved from total blindness.

This brief excerpt of medical history, gentlemen, emphasizes the following truths:

1. The human body is the most perfect mechanical apparatus. More complete is it, than the ingenuity of man can conceive. In it is every form of lever, screw, joint, hinge, band, pulley, shafting; the most perfect pumping station, supply and waste pipes; the best system of telegraphy ever devised; conservatories of music, phonetic instruments, picture galleries, visual apparatus, and reservoirs for patterns of beauty and utility, to be drawn on at will. It is capable, normally, of doing its own repairing and constructing. It is related to everything material and immaterial. Its mechanism and constitution removes it from the grasp of any one-ideaed engineer. It draws its supplies from the vegetable, animal, and mineral kingdoms, its electricity and oxygen from the atmospheric ocean. Earth, air, and the heavens pay tribute to it. It cannot be run by any narrow *pathy*, *ism*, or *sect*. Therefore, true medicine has ever been

broad in its philosophy, seeking and utilizing the truth, revealed in all the realms of nature. As the best enginer is best equipped with accurate knowledge of his engine, so the physician, the engineer of the human body, should have the most thorough knowledge of the constitution of the human system, and the laws governing it. The best anatomist and physiologist, is the best pathologist. The best pathologist, with wisdom and tact in the ready adaptation of means to well defined ends is the best doctor. Again, this mechanism, constructed by the infinitely wise and good God, is not patented. No one is authorized to, or should be so base as to restrict it by secret or patented methods, from the use and benefit of any agency or potency, material or immaterial, which is conducive to its health and happiness. Did Jenner, or Morton, or Simpson, or Pasteur, or Koch, or any other reputable physician or surgeon ever patent a surgical appliance, or medicine, or method, for personal gain?

2. We learn the unity of medicine. Its purpose, the good of all humanity. Its work, seeking the truth. Its persistency, for liberty of mind and the universal brotherhood of man, as steady as the magnet points to the pole.

Again, the sum of all medical knowledge and wisdom is the aggregate of each observation, experiment and discovery made in the past. It can in no sense as a whole, or in part, be claimed as the property of an individual or corporation. Such a pretense is as preposterous as to assert that one leaf is the forest, or one drop of water is the great ocean. It is a common heritage, belonging to humanity. It should be free to all, as is sunshine, air and water. True and honorable physicians dispense knowledge as freely as they receive oxygen from the great Creator. He, who withholds information from the profession for purposes of individual gain is entitled to the cognomen of vampire.

Were he to take out letters patent for a medical formula, or surgical instrument or device, covering it with the pretense of mystery, and feeding on the credulity and ignorance of suffering humanity, he should be branded a Judas Iscariot. In fact, Judas, the traitor was a philanthropist and gentleman, worthy of praise in contrast with such an individual.

With capacity limitless as the universe, and an arena as boundless, he who will work will have knowledge. "Ignorance

in other vocations is to be deprecated; but to you, charged with the conservation of human life, it is a crime."

You go forth from the Medical Department of the University of Tennessee, your *Alma Mater*, whose character is beautiful, and honor precious to you. You are no longer under her protecting care. In the fray and fight of life you will assert your individuality. Your self-respect, containment and courage will be maintained only by keeping your record clean. Your relation to society, and your high position, will forbid indulgence in prejudice, or affiliation with partisan, sect, ism or clique. To you, professionally, all men are equal. Each is entitled to your sympathy and to your ministrations. Your best work will often be unrequited. Ah! more, you will be the victim of calumny, and your motives misunderstood. As the sunshine is superior to darkness, truth and righteousness, dauntless in the presence of falsehood and corruption, you will possess your souls in peace.

I charge you study well the Code of Medical Ethics. Second only to the Decalogue and the Sermon on the Mount, it should be your guide. You may paraphrase it by the Divine injunction, viz.: "As ye would that men should do unto you do even also unto them." With your fellows in the practice, in medical societies, or as journalists and teachers, the billows may run high, the crash of bursting waves may darken the bright heavens with foam and spray. Each individual billow is lost but the same deep sea remains.

The great work of medicine will go forward after this fitful fight shall end. But in this strenous contest, that awaits every man of you who will be a man, the Medical Department of the University of Tennessee will never cease to lend you dignified and upholding aid. Out of the living relation, and loyalty to her, there shall come to you, as her chieftest legacy, a just and generous conception and recognition of the work which you profess.

An institution so inseparably related to the great Commonwealth of Tennessee in her highest interests can not fail to stand to you as essentially connected with the whole magnificent enterprise and achievement of civilization.

Tennessee's history, abundant natural provisions, her good

fame; more than all, the splendid hope of accomplishing that priceless thing, a noble government and a noble citizenship, commit her to the support of her great University. The significance and worth of the Medical Department of this effort of the State to realize her actual work needs no advocacy at my hands.

The Medical Department of the University of Tennessee, young men, will look to her alumni to stand in the future, as in the past, for credit, honor and eminence; sustaining yet in the land somewhat of that lingering and loved radiance that falls from the names of her illustrious founders. In journalism, in teaching, in general practice, in specialization of any form, let the standard be the equal in skill and achievement of the work of men from any school in the land.

One word, my dear friends. Be clean, hold up your lives, be brave—

> "Be noble and the nobleness that lies
> In other men, sleeping yet never dead will rise
> In majesty to meet thine own."

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## THE PREMATURE EXPULSION OF THE OVUM; ITS CAUSES, PREVENTION AND TREATMENT.*

BY A. L. MACON, M.D., OF FREDONIA, TENN.

In preparing an essay upon a subject of such vast importance as this, the question at once suggests itself: Can a paper limited to twenty minutes be so condensed as to cover so all-important a subject and at the same sime be of interest to this Association?

My answer to this question is this: It is a subject in which each and every one of us as general practitioners are more or less interested, and if this brief essay shall be the means of eliciting a free discussion at your hands, then shall I feel amply repaid for my effort.

By the premature discharge of the ovum is meant the termination of pregnancy before the end of the seventh lunar month. In a more restricted sense the term abortion is used to to denote the discharge of the ovum prior to the end of the third

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*Read at Meeting of the Middle Tennessee Medical Association.

month of gestation. While miscarriage is the term applied to the discharge of the ovum after the twelfth week of gestation and prior to the twenty-eighth week.

The relative frequency of abortion to full term deliveries are hard to estimate, from the fact that there are so few statistics bearing upon this subject; some authorities, however, estimate them at from 1 to 5½, while others estimate them at from 1 to 8. In considering the etiology of abortion we must recognize one or two factors as being the immediate cause, viz: Fetal death and uterine contractions. One or both of these conditions must be present in every case of abortion.

The causes which produce fetal death or uterine contractions can be referred to one of three sources. 1. Those referable to the father. 2. Those referable to the mother. 3. Those causes referable to the fetus. They may be either exciting or predisposing.

Exciting causes in their nature are such as falls, jars, blows, the lifting of heavy weights, etc., acting perhaps in connection with some slight predisposition, more often determines an abortion than does everything else.

Among predisposing causes might be mentioned disease as occurring in the fathers, as syphilis, extreme old age or youth, or even any debilitating disease. Disease as occurring in the maternal organism, as tuberculosis, syphilis, the infectious diseases, diseases of the heart, liver, lungs, kidneys, etc., by producing congestion of the placenta. Also should be mentioned chorea, epilepsy, eclampsia, the extremes of life, an irritable nervous organization, fright, emotional excitement, etc., are all more or less potent factors in the causation of abortion. Also among predisposing causes should be mentioned some local conditions which act very much as a determining influence in the production of an abortion. Such, for instance, are any acute or chronic inflammatory diseases of the uterus, or of its adnexa; also the existence of displacements, tumors, or any other degenerative action.

Particularly should be mentioned endometritis and retroflexion. When existing in combination as they often do, they become a very important factor in the production of abortions. Any disease of the ovum, or of its enveloping membranes, may

produce its expulsion by causing death of the fœtus, or else in some way interfering with the attachment of the membranes. Such conditions are often produced by syphilis, cystic degeneration of the chorionic villi, placental apoplexy, abnormal attachments of the placenta, knotting of the cord, and by infectious diseases transmitted through the mother, and occasionally tuberculosis. It is not within the purport of this paper to consider the pathology of abortion, suffice it to say, however, that there is a rupture of the utero-placental vessels which usually results in hemorrhage in the decidna vera, but may be between the decidua and chorion, or possibly into the amniotic cavity. There may be an expulsion of the entire ovum, or else the fetus may be expelled, leaving the membranes, or a part of them, within the uterus.

When called to a case of threatened abortion, it becomes our imperative duty to inaugurate preventive measure, provided the case has not progressed to such an extent as to make abortion inevitable. Under the circumstances then, we have to distinguish those cases which are possibly preventible from those which must be regarded as inevitable. This is not at all times an easy matter, but if we must err it should be on the safe side, and the case should be treated as preventible. Usually in a case of inevitable abortion, in addition to pain and hemorrhage, one of which symptoms is invariably present, we find the cervix dilatable and very frequently can feel the ovum. If we find the cervix unyielding and dilatation not begun, we should certainly consider the case as possibly preventible. Unless it be after the fifth month, when we might determine that there was a dead fœtus. Quoting from *The American Text-Book of Obstetrics* we have to consider in the treatment of abortion: 1. Prophylaxis. 2. Treatment of threatened abortion. 3. Management of actual abortion and treatment of its accidents. 4 Treatment of incomplete abortion. 5. After-management.

In the prophylactic treatment there is no doubt but that great good may be accomplished. Having determined the real cause, as for instance, an endometritis, a utero displacement, subinvolution, etc., or else in the recognition of some constitutional dyscrasia in one or both parents, by treatment of such

conditions before conception, ofttimes our patient is delivered of a healthy child. Again, might we mention the prophylaxis after conception. Right here let me say that if we can have the coöperation of an intelligent patient we have much to expect. By avoiding active exercise, by taking considerable rest, by the avoidance of everything exciting, and in case of retroflexion by the use of a properly applied pessary, and in some cases confinement to bed for quite a long period will safely tide our patient over her stormy period. In the treatment of threatened abortion if we find the cervix undilated, hemorrhage not profuse, and pains light or entirely absent, then should we consider the case as preventible and institute treatment accordingly. By the proper treatment we should hope to control the hemorrhage, relieve the pains and promote healing of the already injured surfaces. To accomplish this result I consider absolute rest and quietude of first importance. Our patient should be put to bed in a secluded and undisturbed room. She should remain in a recumbent position until all danger is past. Her diet should be light. If the bowels do not move regularly mild laxatives should be given. Many remedies have been prescribed in this condition, and have received unstinted and perhaps undeserved praise. I am forced to consider the majority of drugs as undeserving of our consideration in this condition.

As of most benefit I regard opium or some of its alkaloids, again I regard the bromides, chloral, and some of the coal tar products as of some utility by their sedative influence upon the nervous system. If at this critical time any attempt is made to correct any malposition of the uterus, manipulation should be very gently made. If after the preventive treatment described above of a threatened abortion we find the case assuming the proportions of an actual abortion, then the preventive treatment becomes a needless effort, and the indications are then to control hemorrhage and secure comple evacuation of the uterus. Having made thoroughly aseptic the genital organs of our patient, and having made surgically clear our own hands, if upon examination we find the ovum protruding with membranes unruptured it becomes a simple matter to remove it in its entirety. If, however, we find the ovum unseparated, some hemorrhage taking place, then we should consider measures by which hemorrhage

can be controlled, and by which delivery can be expedited. If previous to the end of the fourth month of gestation, then should we apply the one almost specific measure for the arrest of hemorrhage, and for the excitement of uterine contractions. I have reference to the vaginal tampon. Having placed the patient in the dorsal, or preferably in Sim's position with hips well over the edge of the bed, with the aid of either a bivalve or preferably a Sim's speculum and the proper introduction of a tampon, whether made of aseptic gauze, pledgets of cotton or wool, we have the surest method of gaining our desired object.

The tampon should be allowed to remain six to twelve hours, at which time it may be removed, when generally the ovum will be removed with the tampon; or else be found within a dilated cervix where it may be very readily removed. If, however, the first tampon does not cause its expulsion, then it is usually advisable to introduce another. If after the removal of the second tampon it be found that the ovum or a part of it be still within the uterus, then should a digital exploration of the uterus be made, dilating first if necessary, the cervical canal. By careful pressure applied over the fundus this procedure may be very much facilitated. In case of failure by this method to remove the mass we should apply the dull curette, at the same time irrigating with a mild antiseptic solution.

After the fourth month of gestation the tampon is contraindicated, as some danger might result from intra-uterine hemorrhage; therefore to relieve hemorrhage at this time it is well to rupture the membranes and expedite delivery by dilatation and turning of the fœtus if necessary. Should the after-birth be slow in becoming detached, gentle digital manipulation, followed afterward, if necessary, by currettage, is pretty certain to leave a clear uterine cavity.

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

# Selections.

THE INDICATIONS AND MODES OF DRAINAGE AFTER ABDOMINAL AND VAGINAL SECTION*.—So many names of distinguished gynecologists appear on the programme to participate in this discussion that I have deemed it wise to curtail my remarks as much as possible, and, instead of going over the enormous literature on the subject, I will give you the simple rules in reference to drainage which I follow in performing abdominal operations.

Drainage of the abdominal cavity is an expression of the present imperfect state of surgery. It is often an unavoidable evil. It should be limited to appropriate cases, and it is therefore well that the indications for it should be laid down clearly, so that we may have eventually some definite rules that will guide the surgeon in his abdominol work. There are now no fixed rules. Some surgeons avoid drainage wherever possible; others drain as a rule. If I were permitted to pass my judgment on this question as a whole, I would say that the surgeon who has the ambition to operate quickly, to make an impression on the bystanders, should drain frequently; while, on the other hand, the surgeon who proceeds with his work carefully, step by step, with plans well laid out, with his practical knowledge resting on a firm pathological basis, will only drain in exceptional cases. After opening the abdomen the surgeon frequently has to deal with affections that absolutely call for drainage. There is no other course to pursue. He meets with pathological conditions that can not be successfully removed; he meets with cavities the walls of which it is impossible to extirpate, and consequently he proceeds to establish an abdominal fistula, a great consolation to the operator, because it enables him to do something, so that probably during the course of time

*From the Transactions of the Chicago Gynecological Society, January 17, 1896.

Nature will come to his rescue, taking advantage of the temporary drainage, and eventually closing the cavity where drainage was established. One of these conditions is met with in a distended or diseased gall bladder. It is my firm conviction that the best success obtained in cases of disease of the gall bladder requiring opening of the organ, in the absence of a permanent occlusion of the common duct, is the establishment of an external fistula. This operation shows the greatest success, is attended by the least danger—in fact, it is almost devoid of danger, if the surgeon is careful to prevent infection of the peritoneal cavity during the operation.

The next condition—one that is not so frequently met with (but there are now some forty or sixty cases on record)—is cyst of the pancreas. A few bold surgeons have made the attempt, and in a few isolated cases have succeeded in extirpating pancreatic cysts with a mortality of more than fifty per cent. Statistics show that the formation of a fistula usually results in a permanent cure in the course of a few weeks, and that a permanent fistula is the exception.

Very often the surgeon makes a mistake in diagnosis, opens the abdomen for a supposed ovarian cyst or an ovarian tumor of some kind, and is astonished, when he has exposed the abdominal organs, to find a retroperitoneal cyst, a hydronephrotic kidney. Many surgeons under such circumstances have resorted to the formation of an abdominal fistula, thus draining the distended pelvis of the kidney—a very unwise procedure, because a lumbar fistula will accomplish the same object, the formation of which is attended by less danger, and eventually, if it should become necessary, a nephrectomy is attended by a great deal of difficulty if previously the organ has been attached to the abdominal wall. So that I should lay down the rule that in hydronephrosis, whether diagnosticated before or during the operation, the surgeon should make a lumbar nephrotomy.

Then comes that large class of pelvic abscesses without removable walls; abscesses which have had their origin in the in the pelvic connective tissue, perimetric abscesses, abscesses originating within the Fallopian tube, and abscesses within or around the ovary, but in which the careful surgeon will make the most scrutinizing examination before he attempts the work

of enucleation, If he finds enucleation impossible it would have been vastly better if he had dealt in a more conservative manner with his patient, and had resorted to abdominal drainage as taught us by Mr. Tait.

In cases of removable affections the surgeon is often forced to drain for two distinct pathological conditions: First, the direct result of the operation—a bleeding, oozing surface; cases in which it is either impossible to secure the vessels by ligating them, or in which too much time would be consumed in arresting hæmorrhage. We have learned here the value of the Mikulicz drain. I must, however, take issue with Mikulicz and his immediate followers in the technique of applying his drain. He speaks of an iodoform-gauze drain, and any surgeon who has had considerable experience in abdominal surgery can testify to the fact that where the Mikulicz drain is called for we are frequently dealing with large cavities requiring an enormous amount of gauze to fulfill the urgent indication—to arrest parenchymatous oozing. It is in such cases that I have learned to fear iodoform gauze, because the cases are by no means isolated in which a gauze drain composed exclusively of iodoform gauze became the immediate cause of death from iodoform intoxication. This is particularly liable to occur in cases in which the patients' kidneys are not functionating properly or are diseased. It is in such cases that the elimination of the iodoform is accomplished with great difficulty, and hence when accumulation occurs death follows from intoxication. Again, there are cases that are extremely susceptible to iodoform. The smallest amount of this substance may prove fatal from intoxication. I should therefore, in using the Mikulicz drain as a hæmostatic measure, limit the iodoform gauze to an outer layer or two and pack the interior with ordinary sterilized gauze. This advice I am sure you will all appreciate.

There are likewise abdominal operations during which serious complications arise that may constitute a special indication for drainage. I will only allude to cases of pelvic tumors, of pyosalpinx, of extra-uterine pregnancy, complicated by plastic peritonitis, in which sometimes the anterior rectal wall is torn deep down in the pelvis, not accessible to direct measures, and it is extremely difficult, if not impossible, to close the wound effi-

ciently by suturing. It is in such cases that I protect the abdominal cavity as far as possible by interposing between the wound and abdominal contents a few layers of gauze, then establish tublar drainage in direct connection with the visceral wound. I think that almost every conscientious surgeon will agree with me when I make the statement that in all operations for intra-peritoneal suppuration, irrespective of the location of the abscess or the extravasated pus, drainage should be invariably practiced.

Again, in pelvic surgery, where an operation is performed *per vaginam*, the same rules will apply, and it is here that I wish to call particular attention to the intelligent and efficient use of the Mikulicz drain as a hæmostatic agent. I have personal knowledge of three cases of vaginal hysterectomy which resulted fatally, the patient having succumbed to the immediate effects of hæmorrhage. In these cases clamps were used, and the clamp either slipped or some important vessels were not included in the branches of the clamp. It is in doubtful cases that the surgeon should make use of the Mikulicz drain as additional security against hemorrhage after the operation. It is again in pelvic surgery requiring vaginal drainage for abscess that I invariably rely upon the tubular drain. I am sure I will come in conflict with the opinions and teachings of a number of the members present when I take a positive stand in reference to the opening and draining of pelvic abscesses, in which during recent years a number of prominent surgeons, without any hesitation, without any compunction of conscience, added to the necessary incision and tubular drainage the extirpation of perhaps an intact normal uterus, thus combining scientific with mutilating surgery. I think the rule will hold good here as elsewhere that surgeons now as well as in the future must learn that all-important rule—that it is bad surgery to unnecessarily remove an intact healthy organ for the purpose, perhaps, of facilitating drainage that by other methods could have been accomplished equally well. It is in such cases of pelvic abscess of perimetritic origin that careful exploration through the vagina, locating the pus, making, what we have practised for years, an incision resembling a partial separation of the uterus from the surrounding pelvic tissue, an old operation but with new applications. What is the use in the

case of single, perhaps large pelvic abscess, unilateral, of adding extirpation of the uterus to the opening up and draining of such an abscess? There are, however, several dangers incident to opening a pelvic abscess through the vaginal roof that we shall learn to appreciate as our experience enlarges, and I believe it is the duty of every member of this Society to be honest in making his reports, to make free confession of his shortcomings, of his mistakes, of his misfortunes, because it is only in that way that we make actual progress. It has happened to me twice, gentlemen, in opening a pelvic abscess through the vaginal roof, to have also opened the bladder—only a temporary evil, it is true, because permanent drainage of the bladder with Sims' catheter succeeded in the course of a few weeks in closing the communication between the bladder and the adjacent abscess, but, after all, a very unpleasant complication for the time being. That I was perhaps not entirely to blame for making such a mistake, you will all understand that in pelvic abscess the mutual relations between the organs often become so seriously changed by antecedent plastic adhesions that the bladder may become displaced to one side or the other in such a way that it is almost impossible by the best method of operation, based upon anatomical knowledge, to avoid making such mistakes. But I do think that in the future I shall be a little more careful. If I have any suspicion whatever of the bladder being in a malposition, I shall locate it accurately by distending it, as a preliminary measure to exploration of the pelvic abscess by means of an exploratory needle; and then opening the abscess with the knife point of a Paquelin cautery. I have operated upon numerous cases of pelvic abscess by a single point of incision and drainage, and have accurate statements from patients months and years after the operation in reference to the permanency of the good results.

A few words in reference to the technique. From a practical standpoint we must divide the technique of drainage, whether *per vaginam* or through the abdominal wall, into three distinct classes—namely, tubular, capillary, and combined drainage. In cases of drainage made for arresting hemorrhage, as a matter of course we rely upon the gauze tampon. In cases where we expect no serious hemorrhage, but rather copious serous effusion (the product of the primary wound secretion), I invariably

combine tubular with capillary drainage—that is, I take one of Keith's tubular glass drains, pack it lightly with one strip of iodoform gauze, which is an enormous advantage over the older methods of tubular drainage, by removing the fluid from the drain by means of a syringe. In such cases the tube keeps the wound canal wide open, and the gauze drain is sufficient to lead the bloody serum into the hygroscopic dressing. It therefore greatly diminishes the danger from post-operative infection. Drainage by the use of aseptic wicking is only a modification of the ordinary gauze capillary drain. To recapitulate, when I drain for pus. whether through the abdominal or pelvic incision, I invariably resort to tubular drainage, and for the removal of serum combined drainage; while capillary drainage by means of a tampon is reserved for cases in which it becomes necessary to arrest hemorrhage by this method.—*Prof. N. Senn, M.D., in American Gynæcological and Obstetrical Journal.*

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Blood-Letting in Pneumonia.—Forty years ago it was as much the custom of the physician to carry a lancet in his pocket as it is now for him to carry a thermometer. It was considered an essential part of his paraphernalia, and no physician thought of entering the field of general practice without the little instrument in his pocket. It was the mystic wand by which he controlled a tumultous heart and reduced a consuming temperature to the limit of safety. The abstraction of blood was considered a necessity in all inflammatory diseases, and for a physician to lose a case of pneumonia without having bled him in the course of treatment, would have aroused the neighborhood and greatly endangered his future prospects.

I recollect as vividly as if it was yesterday, the first case of pneumonia I ever treated. The patient was a young farmer twenty-three or twenty-four years old. He had a wife and baby. The night before I saw him he had a severe chill. When I arrived at his bedside his fever was high. He complained of severe pain in head and breast, with a constant disposition to cough, expectorating a bloody mucus. He was propped up in bed on account of dfficulty in breathing. I immediately corded his arm and bled him until he complained of being faint and

sick. I then stopped the flow of blood and prepared for him a tea of tart. emetic, which I gave in doses sufficient to keep his skin soft and moist. In the evening I gave him calomel with Dover's powders sufficient to give him ease and rest. The next day I found him a great deal better. With quinine, counter-irritation, etc., he was soon convalescent. It is a question with me, whether the most accepted modern treatment of pneumonia, unaccompanied with venesection, will relieve a similar case of pneumonia as quickly, and with as little injury to the affected organs.

There is no remedy that will relieve the strain and muscular tension like blood-letting. It at once lessens the momentum of the heart that is driving the blood like a force-pump into the engorged lung and threatening over distension and paralysis of capillary vessels.

The condition of the patient is often too perilous and critical to wait for the effects of the remedies used at the present day as substitutes of the venesection. Relief must be given at once or the respiratory organ will be so deluged with effusions and consolidated with exudates that the patient will cease to breathe. Every physician in general practice meets with such cases, and I am sorry to say every one of them proves fatal unless treatment by a bold and independant practitioner who comprehends the condition and danger of his patients, and dares to do his duty in the face of prejudice and denunciation, Delay and vacillation in such cases means death. The action of drugs is too slow, there is no time to wait for their effects.

There is no way to save such cases except to open a vein and relieve arterial tension and pulmonary engorgment. The fear of debility in such cases is a bug-bear, and has caused the premature death of many useful men and women. Venesection in such cases, strengthens instead of weakens, by relieving the engorgment and giving relief to the over burdened-heart.

There is no doubt but that this remedy, powerful as it is for good or evil, was at one time greatly abused. This is no argument against its proper use. I am of the opinion, the day is near at hand when it will again be considered an important remedy in treatment of pneumonia. Of course blood-letting is not necessary in every case of pneumonia. On the contrary, much the

larger proportion of cases do not call for it. But I repeat there are cases, and every practicing physician is liable to meet with them, that can not be saved without free and copious bleeding in the early stages. Without blood-letting they will surely die, with it they may be saved. I conclude therefore by saying, every physician should carry a lancet, and should not hesitate to use it when indications call for it.—*A. N. Perkins, M.D., in Texas Med. Jour.*

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Ophthalmia Neonatorum.—In this short paper on Ophthalmia Neonatorum I will give only the treatment that has given me the most satisfaction:

On first seeing a case of ophthalmia neonatorum, I warn all the attendants of the danger to their own eyes as well as to those of the patient. Some years ago I saw a grandmother lose both eyes as the result of inoculation from her grandchild, not having been warned of this danger, although the patient made a perfect recovery. On first seeing the case, I order (1) a saturated solution of boric acid, for frequent cleansing; (2) glyceride of tannin, ʒ i, aqua dest. q. s,, ℥ i; (3) atropia sulph. gr. ss., saturated solution acid boric, ℥ ss., and (4) argent. nitrate gr. ii, gr. iv, or gr. vi, to aqua dest., ℥ ss. Four droppers are ordered and the nurse is directed to put on one bottle a red or some colored string, with a corresponding color on the dropper used in that medicine, so the droppers and medicine can not become mixed. Acid boric gr. xv, vaseline ʒ i, is ordered to be used on the lids to prevent glueing and to protect the skin during the frequent bathing. The bottles are numbered 1, 2, 3, 4 and 5. No. 1 is the boric acid, No. 2 tannic acid, No. 3 atropia, No. 4 argent. nitrate, No. 5 salt water.

The following directions are given, the numbers on the bottles only used: Bathe eyes well with No. 1 (boric acid solution) every hour; four times a day, after No. 1 has been used, drop into each eye three or four drops of No. 2 (glyceride of tannin); this cleanses the cul de sacs well; the lids should be manipulated thoroughly, and the secretions will come out in coagulated threads; the eyes are to be washed out with No. 1 (boric acid solution again); night and morning No. 3 (atropia solution) is to

be dropped in; I do not wait for involvement of cornea and iris. Four times a day No. 4 (argent. nitrate solution) is used after No 2 (glyceride of tannin) is used, and the lids manipulated well, so as to reach the cul de sac; immediately afterwards, the the eyes are flushed well with sodium chloride ʒ i, aqua Oi. Then the lids are well covered with the ointment.

The glyceride of tannin serves a double purpose; by coagulating the secretion it acts as a cleanser, and then its action on the inflamed mucous membrane is favorable. Hydrogen dioxide is sometimes used for the same purpose; I think its use dangerous, as it seems to have an unfavorable action upon the corneal epithelium, softening it and produciug abrasions, which are followed by sloughs, loss of vision, etc.

I direct that nothing be used about the eye for cleansing, such as sponges, but instead old linen and clean surgical cotton, or such material as can be burned. When there is much edema of the lids, hot or cold applications are of much service. Recently I have had most excellent results from the use of Fromol 1 to 4,0000 or 1 to 5,000 sol. In ulceration of the cornea, Fromol gives most wonderful results.

When these directions are followed from the first day of the disease, I believe no eyes will be lost.—Prof. W. Cheatham in M.D., of Louisville, Ky., in *Pediatrics*.

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Examination of Sigmoid Flexure.—Dr. Howard A. Kelley announces a new method of examination and treatment of diseases of the rectum and sigmoid flexure. This method he has been using for eleven years, but has not perfected it until within the last two years. The details of his procedure are given in the *Annals of Surgery*, for April, 1895.

The steps are briefly these:

1. Thorough evacuation of the bowels.

2. The patient is placed in a knee-breast posture, and the elbows spread out at the sides, while the thighs are perpendicular.

3. A cylindrical speculum or proctoscope, provided with an obturator, is then introduced.

The buttocks are drawn apart and the blunt end of the ob-

turator is laid on the anus, which is also coated with vaseline. The direction of introduction is downward and forward, and when the sphincter is well passed, up under the sacral promontory. The moment the speculum clears the sphincter area, the obturator is withdrawn, then air rushes in and distends the bowel. This constitutes the fourth step in the procedure. Fifth, and last, is the inspection of the dilated bowel by light reflected from a head mirror. Anæsthesia is usually unnecessary, since the specula are mostly of small caliber. They differ in length, the longest being 15 ctm., and this is called the sigmoidscope.

Dr. Kelly states that by means of this method of examination, he has plainly seen and sounded a stricture of the bowel 14 ctm. above the anus. He has also recently seen a polypus not more than 5 mm. in diameter, 10 ctm. above the anus, and he had had occasion to examine cases diagnosed and treated for years as colitis, in which he found the rectum the seat of a chronic inflammatory trouble, limited either above or below the promontory by a perfectly sound mucosa.—*Chicago Medical Recorder.*

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An American Parable of the Blacksmith and the Physician.—Under this heading the *Indian Medical Record* says: "A certain man was hanged, and he died, and he left two sons, both honest men. Now, one of these sons was a blacksmith; but the other became a physician. And after their father had been taken from them, these brothers made their homes in other lands. And the blacksmith would have prospered, but it befell that some one asked him how his father died. And the blacksmith, looking angrily upon him, answered: 'He was hung.' For the blacksmith was an honest man. Howbeit presently, when a horse was missing, men gathered and seized and hanged the blacksmith, saying: 'This man must take after his father.' So the blacksmith did *take* after his father. And, at the same time, in his own city, one inquired of the physician by what means his father died. And the physician covered his face and wept. But while he wept, he considered, saying within himself: "If I say he was hanged, then shall I shock this man, and give him pain. Nevertheless I must tell the truth.' He said, there-

fore: 'My father died of heart failure;' and again he wept, the questioner weeping with him. Then this being told, men said: 'Doubtless, since his father died of heart failure, this good physician and loving son hath made a study of kindred diseases.' So they resorted unto him. And the physician became a specialist, and he looked at them who came in and coughed once and sneezed twice, and demanded $100. And they gave gladly. For the physician was an honest man.—*Practical Medicine.*

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INHALING CHLOROFORM, A METHOD BY WHICH IT IS CLAIMED DANGER IS OBVIATED.—Dr. A. Guerin, of Paris, says in the *Lancet* that death from chloroform may be avoided if inhaled exclusively through the mouth. When death occurs from stoppage of the heart, the cardiac muscular fibers cease to contract under the influence of a reflex action exerted by the nasal nerves on the pneumogastric, stimulating the inhibitory power of the latter on the heart. He further shows that when a rabbit is subjected to tracheotomy, and then made to inhale chloroform directly through the trachea, the drug has no effect whatever on the heart. On the contrary, when chloroform is held before the nose of the rabbit, the heart immediately stops. The trachea being cut transversely, it is obvious that the chloroform inhaled by the nostrils can not reach the heart through the bronchi. Dr. Guerin therefore assumes that the anæsthetic agent exerts its injuries in the movements of the heart through the intervention of the nasal nerves and the cardiac branches of the pneumograstic, the former acting reflexly on the latter.

Dr. Guerin therefore advises that the nose of the patient should be held by the fingers until general anæsthesia is produced, when there can no longer be any reflex action of the nasal mucous membranes anæsthized like the rest of the body.—*The General Practitioner.*

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A NEW STYPTIC.—Roswell Park (Medical News, November 15, 1885) reviews his experience with a spray of 5 per cent. solution of antipyrin, made up with sterilized water, as a styptic

in surgical operations. He has found it an especially useful measure in parenchymatous oozing which complicated operations. It has been tried by many surgeons and found useful, having no deleterious effects, no matter where it was used. He has since found that a combination of antipyrin and tannic acid is still more useful. This mixture precipitates a thick, gummy cohesive substance, which offers the most ideal styptic for certain purposes. An alcholic solution of tannic acid is used and antipyrin added in quantity sufficient to form a precipitate of required consistency. This substance is particularly useful in hemorrhage from bone, for instance, in operations upon the cranium. A small piece of sponge or cotton sopped in it may be forced into a bleeding tooth socket, and in many other ways it may be very useful. There is but one attendant difficulty, due to its remarkable cohesiveness, that when the time comes for detachment or separation it is difficult to remove it. Sometimes it has been necessary to wait for the formation of granulations and separation by natural process.—*Buffalo Med. Jour.*

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Dr. W. W. Keen, professor of surgery in the Jefferson Medical College of Philadelphia, has lately been in Europe, and in relating some of his observations, says:

When it comes to practical surgery, whether it be of mechanical means or operative procedures, or of careful antisepsis, I believe that American surgeons are quite the equal of their European brethren. In fact, as to antisepsis at least, I think in this country we are more careful than many of the the surgeons I have seen abroad. I noticed especially, that I never saw patients brought into the operating-room disinfected the day before as is our usual American custom.—*Columbus Med. Jour.*

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Ferric Chloride in Diphtheria.—(Therapeutische Mon_atshelfte, No. 9, 1895) states that during the last few years he had treated 271 cases of diphtheria, with only a mortality of 8.2 per cent. He attributes his success to the administraton of ferric chloride in the form of a 2 per-cent. solution in glycerin. From a teaspoonful to a tablespoonful of this mixture is given every

hour, until the membrane has entirely disappeared, after which the dose is gradually diminished. When the membrane is extensive, a pure solution of ferric chloride, or one diluted with equal parts of glycerin or water, is applied thrice daily with a piece of wood wrapped with cotton. After the application the swab is burned. He does not attribute much value to alcoholic stimulants. When the stomach is unretentive he feeds by the bowel. He believes that this remedy prevents the spread of this membrane to the larynx, and gives better results than any other treatment, not excepting the employment of antitoxin.—*Univ. Med. Magazine.*

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A New Operation for Varicocele.—Brault (Lyon Medica, October, 1895) describes a new operation for severe cases varicocele which he had frequently practised upon the cadaver and applied with success to two living subjects. This method consists in removing a large elliptical portion of skin from the external and posterior surface of the affected side of the scrotum.

After this flap, the extremities of which are dissected upward and downward, has been dissected away, the enlarged veins are exposed and resected between ligatures. The large and gaping wound is finally closed by bringing the lower to the upper angle of the ellipse, and by stitching together the opposed margins of skin. The operation may be performed rapidly and without much hemorrhage, and it is in many respects superior to that in which a portion of scrotum is removed by a transverse wound.—*Univ. Med. Magazine.*

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Beards and Bacteria.—The bacteriology of the beard has not yet, so far as we are aware, been exhaustively studied; this might be a new world for one of our young Alexanders of pathology to conquer. That it is possible that disease can be carried in the manner suggested will hardly be denied, but we can not say that we think the danger so great that doctors need sacrifice their beards on the altar of hygiene. Most will think even the careful sterilization of the beard on leaving a sick room a counsel

of perfection. If the scrupulous hygienist thinks such a precaution necessary, he should be consistent, and insist on doctors shaving their heads and even their eyebrows. How would our professional sisters like this? To live in the odor of antiseptic sanctity we should, after due purification, clothe ourselves in cotton wool, wrap our heads in sterilized ganze, and go about like veiled prophets of Khorassan.—*Brit. Med. Jour.*

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The Treatment of Itching in Urticaria.—Berliner, of Aix la Chapelle, (Gaz. Med. de Liege, August 22) recommends the following method for the relief of itching in urticaria. The affected surfaces are first wetted with cold water, and then rubbed for ten to fifteen seconds with a minute quantity of common table salt with the pulp of the wetted forefinger. After the friction, a small quantity of oxide of zinc ointment or rice or starch powder should be applied. The application soon causes a pleasant feeling of freshness, the itching diminishes or ceases and the papules disappear. When extensive surfaces have to be dealt with, the saline friction should be made gradually over limited areas, lest too intense a mechanical irritation be produced. At the same time tepid bathing and appropriate dietetic and other treatment should be employed.—*Univ. Med. Magizine.*

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Bromoform in Whooping-cough.—Fiertz lays down the following rules:

In children under ten years, as many drops of bromoform as the child is years of age, *plus* two, should be given every six hours—best in a little sweetened water:

If after eight days the number and intensity of the paroxysms have not diminished, each dose may be increased by one or two drops:

After the paroxysms have disappeared, the bromoform must be continued in the same doses for a fortnight longer; then decrease the doses very rapidly, but the treatment should not be discontinued suddenly.

If the paroxysms only occur at night, the remedy need be given only every eight hours.—*The Practitioner.*

# Editorial.

## THE MEDICAL COMMENCEMENT SEASON.

Good old Father Time, with his relentless, tireless, and silent tread has brought around and placed in the irrevocable past a period that for some months has been looked forward to with great anxiety, bright anticipation, and some apprehension by the young gentlemen who have been in attendance on the lectures at the three great medical schools of Nashville. The graduating classes this year have been somewhat smaller in numbers than in preceding years, this being due to the fact that our progressive schools, in keeping with the demands of the times, have adopted, and for the first session, put into effect the three years of collegiate instruction as one of the requirements for graduation. What was lacking in numbers is more than made up for by the increased excellence of qualifications on the part of those to whom was granted the degree of Doctor of Medicine—a degree that this year means in fact as well as tradition "learned in medicine," for never before was so competent a corps of coadjutors added to the list of the followers of the Divine art and science.

Furthermore, while the graduating classes were smaller in numbers, as predicted nearly a year ago, when two of the schools that had for years been associated jointly in teaching in one building, mutually agreed to separate and "set up house-keeping for themselves" in their own new and handsome buildings, with the most perfect fittings and adaptations for medical teaching, and the other school made material additions to its already excellent and handsomely constructed building, the number of matriculates in all the classes taken as a whole was greater than in any preceding year; and we are confident that when another commencement year rolls around we will find that not only the junior and middle but the senior or graduating classes as well will be still larger.

With its nearly half century's experience, during which time the Capital City of Tennessee has ranked second only to the great metropolitan centers of New York and Philadelphia, with its most excellent, experienced and progressive corps of teachers, with its clinical features combined in that grand municipal charity hospital, contiguous and convenient to all the schools, together with the free dispensaries connected with each, and other private and public facilities, with handsome, new and commodious buildings, fully equipped with all the paraphernalia, laboratories, etc., necessary in this day for thorough and scientific instruction, Nashville and her citizens may well feel proud of her medical schools, and rest well assured that the reputation so justly earned in the past of "the Athens of the South" will be but greatly added to in the future,

THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NASHVILLE held its Forty-fifth Annual Commencememt in the Theatre Vendome, on Tuesday, March 24th, in the presence of a large and highly-cultured audience filling the entire building to its utmost capacity. Nearly half a century of distinguished success makes this one of the historic medical schools of America. It came into existence shortly after the Medical Department of the Transylvania University at Lexington, Ky., had been transferred to Louisville, and for a number of years its only competitors South of that point were the schools at Richmond, Charleston and New Orleans. It soon outstripped all these in popularity, and in its fifth year the numbers of its classes equalled those of each of the renowned schools of Philadelphia—the schools of New York at that time not rivalling the latter in reputation or numbers. Since the war medical schools have multiplied three or four-fold in the South, but the prestige achieved by the original faculty of the Medical Department of Nashville has been maintained by their successors, and through all mutations they have sustained its reputation and popularity. Throughout four or five of the Southern States there is scarcely a community in which the diplomas of many of its physicians have not borne the signatures of the Faculty of this school.

The exercises of the evening were opened by music by the theatre orchestra, and then Rev. George F. Degen offered prayer for the young men about to go forth in the world to practice their profession. More music followed.

The Salutatory was delivered by Mr. Oscar Sayle Burrow, of Arkansas, whose words were well chosen and who closed amid applause.

After more music Mr. James Moore King, Jr., of Tennessee, delivered the Valedictory in a manner that made a fine impression on the audience. He dwelt on the high calling that he and his classmates had chosen, and the duties devolving upon them as practitioners of the art of medicine. His words of farewell were peculiarly well chosen and given in an affecting manner.

After a musical selection by the orchestra, Prof. M. C. McGannon delivered the Charge to the Graduating Class on the part of the Faculty. He complimented the class and congratulated them on their success. He expressed the hope and belief of the Faculty that each and every one went out well equipped to do battle with disease, and that each in his future life would achieve success, would win honor, would shed glory on the Faculty and on their Alma Mater. He then spoke of medical ethics, a subject not included in the regular course. It was thought and said that a gentleman needed no code of ethics, and as a rule it was true. But in order to control the unruly a code of medical ethics had been framed by the American Medical Association. You could not make a man a gentleman by law or by formulating a code, unless he was naturally inclined that way. He advocated a high standard of morality and called attention to the strict prohibition of advertising by physicians. The practice of medicine was not a mere money-making business. Advertising by a phy-

sician was scandalous because the advertiser could not with certainty guarantee a cure. The dealer in soap could have a standard of excellence which he could guarantee. The physician could not guarantee a cure, no matter how trifling the disease. To so promise was to obtain money under false pretenses. The day when advertising becomes general would see medicine cease to be a dignified profession, and be a degraded calling. The attendant physician could not object to the patient's changing his opinion, could not object to a consultation with any reputable physician. Other points in medical ethics were also treated by the speaker, who closed with many valuable hints as to the winning of success. In dealing with life they should never remember that death is just beyond, and give to each and every patient their very best efforts.

Another musical rendition by the orchestra followed and Chancellor Payne, who was in cap and gown, conferred the degrees on the following graduates in a most impressively delivered Latin address, after which they came upon the stage as their names were called by Secretary Ewing and received their diplomas:

Anderson Braxton Allen, Tennessee; Walter Erastus Bartlett, Kentucky; Edward M. Bell, Tennessee; Samuel Moses Bloomstein, Tennessee; James Robert Bell, North Carolina; Matthew Gardner Buckner, Tennessee; Oscar Sayle Burrow, Arkansas; Paul Clements, Tennessee; Malone Mitchel Cooley, Tennessee; Garland Franklin Cummins, Tennessee; Charles Burrell Gannaway, Arkansas; William Roswell Gillett, Texas; Obediah Chauncey Grant, Texas; Washington Allen Harper, M.D., Texas; James Benjamin Harrington, Tennessee; Eli Hunt Harrison, South Carolina; Richard Henry Harrison, Texas; William Ranson Hayne, South Carolina; Charles Benjamin Heimark, Minesota; Robert Hermann Henry, Wurzen, Germany; George Higginson, Tennessee; James Moore King. Jr., Tennessee; Plato Herman Lee, North Carolina; Joseph Robert Lutton, Pennsylvania; Samuel Bryson Medford, North Carolin a James Dunnaway McCann, M.D., Tennessee; Robert Benjamin Morris Tennessee; James Franklin Myrick, Jr., Texas; David Robinson Neal, Tennessee; Claude Pettus, Alabama; John Dillard Quarles, Tennessee; Annie Riordan, Sidney, New South Wales; John Lewis Smiley, Arkansas, James Buchanan Smith, Tennessee; William Henry Smith, Texas; Bailey B. Sory, Tennessee; William Boyles Staples, Alabama; Fred R. Stoner, Illinois; George Harston Stovall, Texas; Vernon LaGrange Terrell, Mississippi; Benjamin Franklin Walker, Tennessee; Waddy Thompson Wilkinson, Jr., Louisiana; William Hamilton Willett, Tennessee; Richard Andrew Wilson, Texas; J. A. Williams, M.D., Mississippi; Percy Hogan Woodall, Tennessee; LeRoy Settle Woollard, Tennessee; James Lee Wright, Tennessee; Finis Ewing Wyatt, Tennessee.

A unique feature of the graduating class was Miss Annie Riordan, of Sidney, New South Wales, who came all the way from Australia to attend the college. She is a pretty little woman, and received much applause when handed her sheepskin.

The diplomas delivered, Prof. J. S. Cain, after a short address, said

it was his pleasant duty to confer the heard-earned honors upon the winners of the distinctions conferred by the college. The first honor, the faculty medal, which also carries with it the internship of the City Hospital, was by Matt G. Buckner, of this city; The second honor, the Alumni Association medal, was won by Percy Hogan Woodall, of Tennessee; and the third, the W. K. Bowling medal, by Obediah Chauncey Grant, of Texas. All of the young men made unusually high averages.

The following received distinguished mention:

M. M. Cooley, Tennessee; J. M. King, Tennessee; C. B. Gannaway, Arkansas; S. W. Bloomstein, Tennessee; and R. H. Henry, Germany.

Throughout the exercises the different speakers were introduced to the audience in appropriate terms by the Dean, Prof. John H. Callender; and at the conclusion the audience was dimissed with the benediction by Rev. George F. Degen.

THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF TENNESSEE

Held its Twenty-first Annual Commencement also in the Vendome Theatre, on Friday evening, March 27th, in the presence of a large, fashionable and well interested audience, made up principally of the fair sex that packed the commodious building to the doors. It was a pleasant, and highly interesting occasion, with a pleasing programme and was universally complimented. On the stage were seated members of the Faculty, members of the Board of Public Works and others. Especially notable was the stage setting, flanked with palms. Across the front of the stage just back of the footlights was a row of Bermuda lilies in pots, all in full bloom. The colors of the University, white and orange, were everywhere visible. The music of the evening was furnished by the Jesse French Orchestral Society, and was given after each number.

Dr. W. P. Jones, President of the Faculty, who acted as Master of Ceremonies throughout the evening in his customary courtly and dignified manner, introduced Rev. J. C. Morris, who offered the opening prayer. He asked especially for a blessing on the young men going out into the world to practice the medical profession.

Dr. J. W. Jordan, of Knoxville, and a member of the Faculty of the parent institution, the State University, was then introduced to deliver the address conferring the degrees. Dr. Charles W. Dabney, Jr., President of the University of Tennessee, who was to have delivered the address, was suddenly recalled to Washington by a telegram from Secretary Morton and sent Dr. Jordan to take his place. Dr. Jordan's address was plain, practical and sensible. He advised the young graduates to do everything possible to hold up the standard of the profession into which they had embarked. The college had done its best with them and if they were not finished, it was because they were too soft to take a polish. The success of the future depended upon the use they made of the next two or three years, whether they spent it in study or frivolity, whether in finishing up the weak spots of their education or in dancing the german. They would get, many of them, but scanty incomes, but they would get

along. Some people would send for them—some who did not know any better, and some who couldn't do any better—and they would gradually build up a practice. But whatever came, let them avoid the tricks of the quack and the charlatan. Much of the mystery with which the medical profession has been surrounded was clearing away, and in the coming fifty years the battle with disease would be fought out in the laboratory, not at the bed-side. In the battle with the millions and billions of microbes, that man would be most successful who was the closest and most intelligent student. In his mind he saw these young men at the bed-side of the sick—in the home of wealth, in the cabin of pathetic poverty—but everywhere he saw them, as he hoped they would be, the ministering angels who would bring hope and life to the sufferer. His address throughout scintilated with wit and humor, replete with eloquence, and was a most enjoyable feature of the evening.

Dr. Jordan, at the conclusion of his remarks, assisted by Prof. Paul F. Eve, M.D., Dean of the Medical Department; and Prof. R. B. Lees, M.D., D.D.S., Dean of the Dental Department, presented the diplomas to the following graduates, who came upon the stage as their names were called:

M. N. Alexander, Tennessee; H. E. Battle, Alabama; A. D. Cudd, South Carolina; J. D. Daniels, Tennessee; C. A. Denison, Indian Territory; W. H. Fillingim, Alabama; J. H. Forrest, Kentucky; B. F. Hines, Texas; C. W. Holland, Kentucky; B. C. James, Mississippi; Lewis Lanzer, New York; G. T. Northcutt, Missouri, W. H. Norris, Kentucky; L. A. Nye, Virginia; J. C. Rumley, Indian Territory; T. R. Sinclair, Kentucky; J. A. Venable, Tennessee; D. R. Waddle, Texas; C. A. Walters, Tennessee; C. V. Wood, Georgia; E. B. White, Kentucky; J. G. Wright, Texas; O. E. Wright, Texas. J. F. Coyle, Alabama; T. B. Fuller, Texas; James Harmon, South Carolina; A. F. Hudson, Tennessee; R. L. King, Mississippi; Z. W. Moss, Missouri; W. P. Menzies, Tennessee; S. P. Myers, Pennsylvania; H. E. Sanders, Tennessee; F. R. Sandusky, Tennessee.

Music by the orchestra followed, and Dr. William P. Menzies, of Tennessee, delivered the Valedictory to the Dental Department. He spoke in eloquent language of the progress of dental surgery in this country, which he said led all the world in dentistry. Europe was dependent on America for the best dentists, for discoveries in dental science. There were twenty thousand dentists in America, twice as many as in the world. Men did not succeed according to their ability, but according to the use they made of their ability. Duty, as Robert E. Lee had written to his son, was the grandest word in the English language. The path to success was rough, not smooth. At the beginning of their career each man must choose his aim in life, whether fame or money. The ways were divergent. Dr. Menzies spoke eloquently of Tennessee and its great men, and bade his classmates a fond farewell, exhorting them to draw new inspiration from the past, hope for the future, and conduct themselves like men in the battle of life.

After music, the medical Valedictory was delivered by Dr. J. A. Ven-

able. Dr. Venable spoke slowly and with deliberation. He said that despite the jokes of the comic papers directed against the valedictory orator, it was a pleasing and appropriate custom that one should speak the common farewell of a class united for three years in the pursuit of the same object, who were about to separate. It was a duty sad and yet pleasant. So far they had been lingering in the delicious warmth of life's morning. The trump of duty had sounded now, and they must march forth to conquer. The physician may not take or refuse cases like a lawyer. No morning bell summoned him to labor, no evening bell told him when to cease. No time could be set apart as his own. When summoned he must up and away. All life's sorrows he must see; the mother in anguish over the death of her first born, the children sobbing over the death-bed of the mother or father. Yet it was also his to watch the first faint glow of health on the pallid cheek, and know that he had called it there by his proper treatment. As the oak added every year a new layer to its growth, so should the true physician enlarge his knowledge every year. Dr. Venable closed with an affectionate appeal to his classmates to ever conduct themselves so as to honor themselves and the grand old University of Tennessee.

A medley of Southern airs by the orchestra was greeted with many cheers.

Prof. E. G. Noel, M.D., D.D.S., delivered the charge to the dental graduates. His parting injunction was never to expect failure, but to win success. Success did not always mean financial success. Some of the best known men in the various branches of medicine had died so poor that that their brethren had had to care for their families. In the great gulf of time all questions of wealth were forgotten while professional achievements lived in the history of humanity. Not that they should labor without reward, for the laborer was worthy of his hire. To succeed, the dentist should be a gentleman of culture and refinement. Whatever of polish he might lack at the outset could be acquired. Books should be the companions of leisure hours, for in them all the knowlege of the past is written down. Current literature should not be neglected, unless one wanted to be known as a man of one idea, and as one who talked "shop." Choose as companions those intellectually or morally your superiors.

Prof. A. P. Warterfield, M.D., then delivered the charge to the medical graduates, which we are gratified to place before our readers in full in the Original Department of this issue. It is needless to say that it was delivered in a chaste, graceful and eloquent manner, as this teacher has in addition to his fund of medical lore a gift of oratory.

The prizes were then awarded by Prof. John Keeble, LL.D., Professor of Medical Jurisprudence, as follows:

*Medical.*—Faculty medal. Charles Vann Wood, of Georgia; Faculty second honor, Charles Anthon Walters, of Tennessee; Faculty third honor, Alonzo Dean Cudd, of So. Carolina; special medal, surgical laboratory, Alonzo Dean Cudd, of South Carolina.

*Dental.*—Faculty medal, H. E. Sanders, of Tennessee; Faculty second

honor, Morrison Bros.'s medal, J. L. Pennington, of Tennessee; Faculty third honor, A. F. Hudson, of Tennessee.

*Hospital Appointments.*—City Hospital, Charles Vann Wood, of Georgia; County Asylum Hospital, Charles Anthon Walters, of Tennessee.

In awarding these prizes Mr. Keeble spoke in a most humorous and interesting way, and made a few appropriate remarks on presenting each prize to the winner.

A large number of flowers and floral designs were then distributed to the graduates. Prof. Waterfield being also remembered with a beautiful basket of roses.

Rev. J. C. Morris dismissed the audience with the benediction.

The Medical Department of the University of Tennessee began its existence in 1876 as the Nashville Medical College, having for its quarters the upper story of the old post-office building, corner Cherry and Cedar streets. Among its illustrious founders may be mentioned the late Profs. Paul F. Eve, W. K. Bowling and T. B. Buchanan. It moved the next year to the Douglas building on North Market Street, and in 1880, planned and built its commodious edifice on Broad, between Vine and High streets. It became the Medical Department of the State University in 1879. Closer connection was formed in 1893 by the Board of Trustees and it became an integral part of the State University. From 1876 to 1893 Dr. Duncan Eve was Dean of the Faculty. In 1893 Dr. Paul F. Eve was elected Dean and still occupies that position. Among its professors is one of the oldest medical teachers in the South, Prof. J. Berrien Lindsley, who has been a teacher of medicine for over a half century. When first-class teaching talent is discovered in the profession, it is added as rapidly as possible to the Faculty, a number of new men being elected to chairs just prior to the past session. The school has ever had for its motto a high standard of medical education and has steadily maintained this principle, until to-day it lifts its head with pride at the advancement it has attained.

### MEDICAL DEPARTMENT OF VANDERBILT UNIVERSITY.

Tuesday evening, March 31st was unquestionably a *gala* occasion on the part of the friends, faculty and students of the Medical Department of this great Southern University. The handsome, commodious and magnificent building was a flood of light from top to bottom, affording not only a noonday illumination to the perfect adaptation in every detail of this handsome addition to the many fine buildings of the Capital City of Tennessee, but also showing off to the greatest advantage the handsome toilets, bright eyes, and beautiful forms and features of the fairer portion of the large audience drawn from the elite of the city, who graced by their presence the twenty-seconed annual commencement exercises; their beauties and charms but added to by the floral decorations that transformed this intellectual work-shop into a bower of beauty.

The handsome main lecture hall or auditorium with its seating capacity nearly doubled by extra chairs arranged in the lobbies and aisles was

filled to overflowing, and the occasion was of a character never surpassed if equalled in this great educational center, and the fashionable and magnificently proportioned audience present will set it down as an epoch in university life in Nashville and the South.

The class reflected the greatest honor upon their Alma Mater and upon the founder of the great University. Perhaps never before have exercises of this nature attracted such general and decided interest. Much was expected from the programme of the evening, and there were no disappointments. Each detail of the programme was carried out with the utmost grace and intelligence. In fine, it was one grand success.

The audience was composed of Nashville's most cultured and refined people, society folks, business and professional men, and of the last, physicians. There were educators and whole bevies of beautiful school girls, who had come to do honor to the young gentlemen about to step out into the world with a noble mission to perform.

Flowers were everywhere. They were scattered profusely on the rostrum, and they lay in magnificent bunches on the tables and in jars on the floor. "Old gold and black," the college colors, floated from the high ceiling and hung in peaceful streamers over the rostrum.

Music by the Jesse French Orchestral Society interspersed through the evening's exercise entertained the occasion.

The Chancellor of the University, Dr. J. H. Kirkland, with the Faculty of the Medical Department, occupied the rostrum, with the graduating class in the first row of seats immediately in front.

The services were opened with prayer by Dr. R. A. Young. After an orchestra selection, the Dean, Dr. W. L. Dudley, delivered the Commencement Address, taking for his subject "The Development of Medical Education." The handsome, portly physique of the genial Doctor lent a marked and pleasant flavor to his interesting, masterly address.

With a brief review of medicine from the earliest ages, he gave a succinct but brief history of medical teaching from its infancy to the present day; calling attention to the earliest school established on this continent, by Dr. Cadwallader, with its one professor, limiting his instruction to the two branches of anatomy and surgery; the first school in Philadelphia, with its teaching corps increased to five professors, on down to the present day, with the complete building and its perfect parapernalia and apparatus, with full and experienced corps of professors and a museum and efficient staff of instructors and assistants. Among other things he said: "More has been done for the advancement of medicine in the nineteenth century than ever before. Medicine is no longer a myth or mystery, as in ages past, but is now based on scientific facts. All progress in the science of medicine must be accomplished in a practical way. No longer is it taught that students must bury themselves in books to learn, but instead they are taught in laboratories, where they can scientifically investigate and learn in a practical way."

The Valedictory Address of Dr. Edwin B. Anderson, of Tennessee, on "The Issues of Life," was delivered in a most happy and appropriate

style. The evanescence of life's joys, he said, could not fulfil the highest hope of man's existence. It must some day reach its zenith from whose heights the fall would be rapid and horrible; so it would be far better to build upon a surer basis. If every member of this class, he said, did not attain a high degree of success it could not be the fault of the college or its professors. He concluded his admirable and appropriate address with the following:

"Fellow students, my beloved classmates, in consideration for the generous spirit which has been manifested by all of you since my appointment to the honored position of valedictorian, allow me to return my sincere thanks. I feel that in representing such a class of young men I have had conferred upon me a distinction which any man might feel proud to own, and I can assure you that my appreciation shall be demonstrated by my best efforts to sustain that high standard which you have set for those who shall go out from these halls. Those links of affection which bound us together during student life must soon be broken, and we should perpetuate the principle of an immaculate friendship.

Let us forget all the evils that have transpired and all clouds that have shifted across our social sky; but, gathering up all the kind deeds and actions, let us plant them in soil of an immutable love and water them in tears of eternal remembrance.

The closing session has been one of harmonious labor and unbroken enjoyment, but over the sunlight pleasures of this memorable period the eclipse of separation casts the deep, overwhelming shadow of regret. Dear old lecture rooms! The class of '95-96 casts a long-departing look at thy sacred walls and vacant seats, and bids you good-bye! Every familar spot, every pleasurable event comes flashing across our minds at once, and to all these we say good-bye! Beloved Faculty, students and friends, wishing you all much happiness, and hoping that your futurity may embellish your lives with all the splendors of an enviable success, we bid you a friendly good-bye."

Dr. Anderson took his seat amid pronounced and continuous applause.

Chancellor Kirkland, in an address previous to bestowing the diplomas, said: "We have looked forward to this occasion, as we desired the public to inspect our college and see what we have accomplished. That we have not invited the public here before is because we did not have our apparatus. In fact, all of it has not arrived yet. We are proud of our college and we know you will be when you when you examine it.

"We have labored to make this college one of the finest in America. We have here every facility for the teaching of medicine.

"In twenty-one years Vanderbilt has sent out into the world, as graduates of its medical department, some 2,000 students. Of some of them it is proud and of some it is not. But we know we have done our best."

"We recognize that what would do 20 years ago as a college for the teaching of medicine would not do for to-day, hence we built this magnificent college, equipping it with all the latest medical devices.

"The class that graduates to-night has had better advantages than any other heretofore, and consequently much will be expected of its members."

In conclusion, Chancellor Kirkland gave some valuable advice to the young physicians, and also thanked the members of the faculty for the valuable assistance they had given him.

The Dean of the Medical Department, Prof. Dudley, then presented the diplomas to the following-named gentlemen:

E. B. Anderson, J. P. Bates, L. E. Burch, M. Cullom, W. S. Embry, J. A. Gaines, R. E. Harris, D. W. Hoffman, W. G. Hough, B. L. Jean, J. H. Karsch, H. Marr, J. H. McCall, J. H. McSwain, of Tennesse; J. R. Craig, of Arkansas; F. M. Fowler, of Illinois; A. W. Lipscomb, W. W. Moore, of Alabama; W. F. Robinson, C. E. Scharnagel, of North Carolina; D. E. Seay, J. N. Taylor, Texas; J. P. Taylor, W. S. Taylor, Tennessee; J. H. Wagner, California, and L. Woodard, Tennessee.

Dr. Dudley, in appropriate words, presented Dr. Harrington Marr, of Nashville, Tenn., with the "Founder's Medal" as a reward for standing the highest examination. Dr. Marr, as is customary, will be made a resident physician of the City Hospital as another reward for his examination.

Dr. John A. Gaines, of Tennessee, received the second honor. He will be placed in the Vanderbilt dispensary. The third honor was won by Dr. W. S. Embry, of Tennessee. Dr. Robert E. Harris, will go to the County Hospital as an interne.

The flowers received by graduates from friends were many and beautiful.

He also read out the names of the members of the Junior, Middle, and Senior classes, who were entitled to honorable mention, and whose names would be so enrolled on the University roster and published in the annual catalogue.

The exercises having been concluded in a most satisfactory and agreeable manner, the audience were invited to visit in detail, and thoroughly inspect the excellent building and its perfect adaptation for the purposes designed. The various professors and instructors were most attentive in explaining the uses of the various halls and apparatus to the many who availed themselves of the invitation, and to whom it was indeed a revelation, and an attractive feature of the evening.

*The College Building.*

After arduous competition, on the part of the leading architects of this section, to whom was submitted the views of the Faculty in writing, arrived at after mature and careful deliberation, the design of Mr. Julius Zwicker was accepted, and the building erected last summer under his supervision and that of the Faculty.

It is located in an open square, on the corner of Summer and Elm Streets, one of the most pleasant portions of the city. Handsome resi-

dences close at hand furnish convenient boarding facilities and agreeable surroundings. Two lines of electric cars pass in the immediate vicinity of the college, thus rendering it accessible from all points of the city.

The college building is an imposing structure, four stories high, comprising 10,000 square feet ground floor surface.

In designing the building, the Trustees were governed by two ideas; first, to provide for the the students commodious, comfortable, and elegant sanitary quarters, and, secondly, to erect a structure so arranged as to meet the requirements of advanced medical education. Every facility is afforded for conducting a combined didactic, laboratory and clinical course. Facing Summer Street, the principle north and south thoroughfare of the city, the building runs back along Elm 160 feet, with an open square to the south. This location assures a wealth of light and ventilation. In perfecting the plans, the architect has carefully avoided narrow halls, recesses and alcoves, every part of the building being thus abundantly lighted and ventilated. The plumbing, such an essential feature in an institution of this kind, has all the modern requirements of sanitation.

The First floor.—The entrance is on Elm Street, and intended for the exclusive use of patients applying to the dispensary service. The larger part of the western half of this floor is arranged for an out-door clinic, the remaining portion being occupied by the arena of the surgical lecture room. The eastern half is entirely occupied by the chemical laboratory, in a cellar beneath which are the engine rooms, furnaces, etc.

Second Floor—The entrance to this, the principal floor of the building, is on Summer Street, and is reached by a high flight of stone steps. On this floor are the medical and surgical class rooms, a large reception room for students, the Faculty room, offices of the Dean and Secretary, and janitor's quarters are near the entrance. This floor communicates by broad stairways with the third floor above, and with the laboratory and chemical department below.

Third Floor.—Here is located the principal lecture room, with a seating capacity for 500. On this floor, also, are the laboratories of bacteriology, physiology, microscopy; also the museum and library. The numerous and costly microscopes, the microtomes, culture apparatus, sterilizers, test-tubes, retorts, furnaces, etc., were indeed a wonder and the subject of admiration, the department of Pathology and Bacteriology being most perfect in every detail.

Fourth Floor.—This is the anatomical part of the building, and is occupied chiefly by the dissecting hall, private dissecting rooms with their necessary attachments and conveniences; there is also a spacious class room for anatomical demonstrations.

Recognizing that the material advantage in medical education demands a proper gradation of the course and classification of the students, the modern college building must be provided with ample and properly adapted class rooms. In this way, the method of instruction which obtains in other technical sciences may be pursued to the best advantage. Vanderbilt University has constructed her medical school with this ob-

jeet in view. Six separate rooms for instruction are provided, each adapted to its purpose.

One of the special and most attractive features of the college is the surgical lecture room. It has its arena on the first floor, and seats rise abruptly through two stories. The room has a seating capacity of 280, and is architecturally designed to afford a perfect view of the arena. All of the beutiful material employed in the construction of this room permits of thorough washing, thus observing the modern idea of asepsis. The arena, 20x16, is a semicircle, and is equipped with the conveniences of a modern operating room, including hot and cold water, sterilizers, filter, instrument stand, operating table, etc. The floor is of encaustic tiling, inclining to a lateral drain. In close relation with the arena are the surgical consulting room and the anæsthetizing room. Through a broad arched window, ample northern light falls upon the arena. At night it is illuminated by electric and gas light. The students enter this room at the rear by a short stairway on the second floor.

The medical lecture room at the east end of the building accommodates 280 students, and is a well-arranged auditorium. In addition to these lecture halls, there are on the second floor two class rooms, each to accommodate 100 students.

On the third floor is the main auditorium, with a seating capacity of five hundred. The anatomical class-room, with accommodations for one hundred and fifty students, is on the fourth floor. Here it is intended that special instruction in surgical anatomy and operative surgery be given advanced students. The dissecting hall is located on the fourth floor, and comprises a large room 40-60, and a number of small rooms for prosectors and advanced students. In the arrangement of this hall much consideration for the comfort of the student has been shown. A dressing room with numerous lockers and toilet room is provided. The crematory, storing and embalming room, necessary conveniences of this department, are in connection with the main hall. The floor is asphaltum with gutter drainage. The dissecting tables are metal top, and each is provided with portable lights. In the arrangement and equipment of this room every effort has been made for the protection against filth and odors. Indeed, so perfect is the arrangement here that at the close of the busy season in this department, it was as free from offensive ordors and effluvia as a first-class Parisian cafe, and its neatness and cleanliness was the subject of repeated remarks from the many visitors of both sexes, to most of whom a "dissecting room" was as little known as the whereabouts of Fritjold Nansen or the north pole.

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THE SIXTH ANNUAL MEETING OF THE ASSOCIATION OF MILITARY SURGEONS OF THE UNITED STATES will convene in Philadelphia, Pa., on May 12th, 13th and 14th, 1896, and the indications are most flattering for the largest attendance since the organization; many distinguished representatives from the several military services of the United States, as well

as a large gubernatorial detail from nearly every State in the Union, have been assured.

The morning session of Tuesday will be held at the Broad Street Theatre, at 10 o'clock, where addresses will be made by Governor Hastings, Mayor Warwick, Gen. Snowden, Dr. DaCosta, and President Read; also the Report of the Committee of Arrangements, by Chairman Maj. J. Wilkes O'Neill.

An interesting programme of scientific papers has been arranged to be read and discussed during the day sessions.

The evening will be given up to pleasure, which has been amply and generously provided for by the Committee of Arrangements, in the manner of receptions, social entertainments, etc.

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THE AMERICAN MEDICAL ASSOCIATION will hold its forty-seventh annual meeting in Atlanta, Ga., May 5th to 8th, next, and from indications will be largely attended. Railroad rates at one and one-third fare for the round trip on the certificate plan, reduced hotel fare, the pleasantest season in the year to visit this flourishing and progressive city, and the well-known hospitality of its citizens, all will ensure a most enjoyable time.

Dr. W. F. Westmoreland, the Chairman of the Committee of Arrangements, and a corps of active and energetic associates will see that everything is done to make the visit enjoyable. The programs for the several sections are well filled, and in addition to the intellectual treat that will be afforded in the meeting an old fashioned Southern barbecue is promised, as well as other social features.

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THE TWENTY-FIRST ANNUAL SESSION OF THE AMERICAN ACADEMY OF MEDICINE will be held in the Dancing Hall of the Hotel Aragon, Atlanta, Ga., on Saturday, May 2nd, and Monday, May 4th, 1896.

The proprietors of the Aragon have made special rates for those who attend the meeting. The Secretary invites correspondence on any of these topics, and also from those who may desire a copy of the completed program, when it is issued. Full information will be promptly given on any of these subjects.

The Academy will meet in executive session with closed doors on Saturday, May 2, at 10 A.M. The open session for the reading of papers will begin at about 11 A.M., there will be a recess for lunch from 1 to 2:30 P.M. The "Reunion Session" and annual dinner will be held on Saturday evening. An executive session will be held on Monday morning, after which the special discussion on "Methods of Medical Education" will be the order of the day. The Association of American Medical Colleges, and the Confederation of the State Boards of Medical Examiners and Licensers have accepted the invitation of the Council and will participate

in this discussion. The time-table for the day, and the time for adjournment will be determined by the circumstances.

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CHRONIC CYSTITIS.—The *Bulletin* was instrumental in calling my attention to the combination of drugs known as lithiated hydrangea, and a case of chronic cystitis has yielded so happily to its administration, that its report may be of interest.

Patient, a married lady, set 30 years, suffering from calculi, much reduced in flesh, of nervous temperament, and desponding, hypochondriacal disposition. I had used at different times the simple fluid extract hydrangea, uva ursi, buchu, flax seed tea, and elm water, as well as washing out the bladder with a solution of nitrate of silver, etc., without success. I then commenced the use of lithiated hydrangea (Lambert) in teaspoonful doses four times a day, and after three days increased to tablespoonful doses. At the end of the first week I could see no marked change, but persisted in its administration. On the morning of the eleventh day of treatment the patient was reported much worse, and my visit found her suffering intensely and continuously passing water, in small quantities, containing clots of blood. I injected four ounces flax-seed tea and laudanum into the bladder, which partially relieved the pain and tenesmus, and enabled the passage of a large quantity of water, containing three ounces, by weight, of what I supposed to be phosphate of lime. I then added fifty per cent. of the fluid extract of buchu to the lithiated hydrangea for several days, during which time she continued to pass the brick dust deposit, which was followed by a gradual improvement in her general condition. I used no other treatment except to keep hot poultices over the pubis. She now has no trouble whatever in passing her water, and no pain or soreness over the region of the bladder. I must ascribe the ultimate benefit to the lithiated hydrangea on account of its removal of the cause of irritation—*i. e.*, the dissolution of the calculi.—P. McAdams, M.D., Rosedale, Ohio, in *Med. Bulletin*.

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MALTINE WITH COD LIVER OIL.—In influenza, malnutrition, wasting diseases, and tuberculosis, when the digestive and assimilative powers are impaired, raw cod liver oil is digested with difficulty.

Emulsions of cod liver oil contain a large percentage of inert matter.

"Maltine with Cod Liver Oil," by virtue of its richness in diastase, is easily digested and assimilated. It does not contain a particle of inert matter, being simply the combination of thirty per cent. of pure Norwegian cod liver oil, with seventy per cent. of Maltine.

The combination of these two valuable therapeutic agents is effected by an ingenious vacuum process which insures stability, palatability, and the retention of diastase.

"Maltine with Cod Liver Oil" is perfectly miscible with water, milk,

LOUIS PASTEUR.

JAMES MARION-SIMS.

SIR ASTLEY COOPER.

SIR MORRELL MACKENZIE.

SAMUEL DAVID GROSS.

THESE portraits are from "Mellier's Galaxy of Eminent Medical Men," which has recently been issued by the Mellier Drug Company, of St. Louis, manufacture

wine, spirits, tea, coffee, etc., thus affording a pleasing variety to the usually capricious palate of the invalid.

Maltine, while in itself a partially predigested food, contains a sufficient amount of the starch-converting enzyme, diastase, to digest thirty times its weight of starch.

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"THE CARE AND FEEDING OF INFANTS," is the title of a little book which contains much of interest to mothers in regard to the feeding of their children. It is published by the Doliber-Goodale Co., of Boston, Mass., who will send you a copy by mail, free, if you write for it. To those who have not tried Mellin's Food they will send by mail, a sample bottle sufficient for trial.

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THE Phosphates of Iron, Soda, Lime and Potash, dissolved in an excess of Phosphoric Acid, is a valuable combination to prescribe in Nervous Exhaustion, General Debility, etc. Robinson's Phosphoric Elixir is an elegant solution of these chemicals.

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IT HAS been demonstrated in hundreds of cases that the effect of Protonuclein as a prophylactic is most marked, and of the utmost importance. Where there is an infectious disease in a family, every member should commence the use of Protonuclein at once. It will seldom fail to render them immune.

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I AM slow to give an opinion until it is justified by conviction. Continued trial of Peacock's Bromides in nervous disorders where the compounds of bromine are indicated, has resulted in a full recognition of the decided superiority of your preparation over any of the bromides singly administered. In efficacy and promptness of action, regardless of idiosyncrasy and other conditions, Peacock's Bromides excel in such a degree that when they are within reach I never prescribe or employ the bromides in any other form.

Washington, D. C. A. B. C. CLEMENTS, M.D.

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GUAIACOL CARBONATE AND CREOSOTAL act continuously and mildly on the digestive tract and the entire organism. This continuous absorption is a necessary condition for their therapeutic effect. Disassociation takes place slowly in the intestines; and, unlike other antiseptics, the carbonates are distributed over the whole duodenum, jejunum and ileum. While creosote and liquid guaiacol injure the digestive tract by causing chronic inflammation of its mucous membrane, Creosote Carbonate and Guaiacol Carbonate tone it up and stimulate it.

Corresponding to the improvement in the nutrition appear the other effects of these carbonates in tuberculosis, lessening and disappearance of the cough, expectoration, fever, night-sweats, rales, areas of dullness, etc.

By the use of Guaiacol Carbonate in the treatment of typhoid fever, the cause of the disease is directly attacked. The malady thus runs an antonishingly quick and mild course, and there are no secondary symptoms at all.

---

PARTURITION—Dioviburnia, (Dios) in teaspoonful doses every hour after parturition, is the reliable agent to prevent after pains and hemorrhage. It being the most powerful uterine tonic attainable, having direct action on the uterus, expelling blood clots, closes the uterine sinuses, contracting the womb and preventing subinvolution.

In severe cases fluid extract of ergot should be combined one part to four of Dioviburnia. It is the experience of the most progressive practitioners that in all cases where ergot is indicated, its action is very much more efficacious by combining with Dioviburnia in the above proportion.

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SANMETTO.—I have been using Sanmetto for several years, and find it invaluable in nearly all kidney and bladder troubles, especially those accompanied by irritation or inflammation of the mucous membranes, as well as in sexual decay and pre-senility. WM. F. MITCHELL, M.D.

Addison, Pa.

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CHRONIC DRY NASAL CATARRH.—The following prescription is recommended by one who has successfully tried it for chronic nasal catarrh:

1 oz. liquid vaseline.
¾ oz. Sanmetto.
¼ oz. Glycerine.

To be used as a spray three times daily through an atomizer, and to take internally Sanmetto in teaspoonful doses four times a day.

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

# Reviews and Book Notices.

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By J. LEWIS SMITH, M.D., Clinical Professor of Diseases of Children, in the Bellevue Hospital Medical College, New York. New (8th) edition, thoroughly revised and rewritten and much enlarged. Handsome octavo of 983 pages, with 273 illustrations and 4 full-page plates. Cloth, $4,50; leather, $5.50. LEA BROTHERS & Co., Publisher, New York and Philadelphia. 1896.

Smith on Children has been the familiar friend and counsellor of a generation of physicians, and equally the leading textbook on its subjects for a generation of medical students. The department it covers is one of the larger specialities, deriving its importance from the universality of the cases, from the special affections to which children are liable, and from the clinical difference which must be observed in the diagnosis and treatment of human maladies in general when they affect the young. A guide to the diseases of children necessarily forms the part of a physician's working library, quite as much as a treatise on practice.

Professor Smith has received the most unusual compliment implied in a demand for eight editions of his work. He has thus been enabled to keep it constantly in touch with the advance of its subject. In the present revision he has sought the assistance of Dr. Stephen Smith, equally eminent as a surgeon, to whose pen are due the sections on the Surgical Diseases of Children, a new feature. It goes without saying that the medical portion of the work is thoroughly revised. In connection with these changes the five-fold increase in the number of illustrations and the addition of one hundred pages and several full-page plates will make the volume one to be obtained not only by those who possess its predecessors, but also by students, and those physicians who have not yet learned to depend upon its guidance.

In the present issue the subject of surgical diseases of children has been added; this portion being treated by Dr. Stephen Smith, whose own work on Operative Surgery is well known. The new edition of the Diseases of Children is therefore not only

thoroughly revised, but also greatly enlarged, and it will be used by students and practitioners as a complete and authoritative guide to the surgical as well as the medical aspects of the diseases of childhood. The new issue will contain five times as many illustrations as its predecessor.

ELECTRICITY IN ELECTRO-THERAPEUTICS. By EDW. J. HOUSTON, Ph.D., and A. E. KENNELLY, Sc.D. Cloth, 412 pp., 128 illustrations; price, $1.00. THE W. J. JOHNSON CO., Publishers, 252 Broadway New York.

In order to meet the growing requirements for ample and recent information on the fundamental principles of electricity and magnetism as employed in electro-therapeutics, Drs. Houston and Kennelly have prepared a volume entitled "Electricity in Electro-Therapeutics." This book treats of electricity and magnetism from the most modern standpoint, in language so simple that no special training in these sciences is required to understand it. All mathematics, except simple arithmetic, have been excluded. The profuse illustration of the book also aids in the ready comprehension of the subject treated.

Drs. Houston and Kennelly are well known in the electrical world, and all matters pertaining thereto; the former especially in connection with the "Houston System," so largely used in the street-car service of all large cities, and as the author of quite a number of important electrical publications.

INFANTILE MORTALITY DURING CHILDBIRTH AND ITS PREVENTION. By A. BROTHERS, B.S., M.D., Visiting Gynecologist to Beth Israel Hospitale, New York; Attending Gynecologist to the N. Y. Clinic for Diseased Women; Instructor in Operative Gynecology at the N. Y. Post-Graduate Medical School, etc., etc., (being the Wm. Furness Jenk's Prize Essay of the College of Physicians of Philadelphia). 8vo; cloth, pp. 179. Price, $1.50. P. BLAKISTON, SON & CO., 1012 Walnut Street, Philadelphia, Publishers. 1896.

Of the six essays received, this was awarded by the committee the prize of Five Hundred Dollars, and was evidently well worthy, notwithstanding how deserving were the others. The writer gives us the experience of ten years active midwifery practice, combined with a large experience in the field of pediatrics and every-day gynecology. It takes a stable and valid stand in behalf of the life of the unborn and newly born child,

and unquestionably will prove a valuable addition to both obstetric and pediatric literature.

The following extract from the author's preliminary remarks is worthy of inculcation by every teacher of obstetrics:

"Besides being properly educated, the obstetrician of the 'first water' must be a man of sound judgment, conservative as a rule, but capable of showing intense coolness and courage under emergencies. He must be a man of patience, but one who will not sacrifice infantile life by delay. He must be willing to leave the majority of cases to nature, but must not shrink, in cases of necessity, from the thoughts of version, forceps, symphyseotomy, or Cæsarean section. And, although it would be manifestly exaggerated to expect every general practitioner to be prepared to perform all these operations himself, he must be sufficiently well informed to know the indications for these various methods of interference and sufficiently at home in gynecological work to be a useful assistant instead of an obstruction."

NEW METHODS IN OPHTHALMOLOGY, as Developed by G. C. SAVAGE, M.D., Professor of Ophthalmology in the Medical Department of Vanderbilt University, ex-President of the Nashville Academy of Medicine, President of the Tennessee State Medical Society, Member of Eighth International Congress of Ophthalmology, Editor of the "Ophthalmic Record," etc., etc. Third Edition. 8vo., cloth, pp. 270, with 58 Illustrations. Price, $2.00. Published by the author, and printed by the Publishing House of the M. E. Church, South, Nashville, Tenn. 1896.

But little over two years have sufficed to demand the third edition of this excellent little monograph of no little value to the specialist in eye diseases. Furthermore, the general practitioner will find here quite a number of important "truths" that will repay the time spent in acquiring a knowledge of them.

The previous editions of the work have met with a most cordial reception by members of the profession devoting their time, talents and energies to the same specialty as the author.

The following quotations from notices of the first edition carry more weight and are more worthy of consideration than anything we could say:

*American Journal of Ophthalmology:* "Whether agreeing with the author's views or not, the perusal of this little book will well repay the buyer."

*Archives of Ophthalmology:* "The most original of the author's investigations are those on the oblique muscles. They are, as many other subjects contained in the volume, open to serious criticism, but they should be read, carefully considered, and repeated, in order to verify their truth and value."

*The Quarterly Medical Journal*, Sheffield, Eng.: "There is a refreshing clearness and novelty about the contents of this book. The question of the muscle balance of the eyes is one which, especially recently, has recevied a good deal of attention. This is particularly the case in America, and the author is one of those who is aiding in the elucidation of this important but intricate subject."

Notwithstanding the excellence of the preceding editions, this one is quite an improvement, containing new matter, and a more complete consideration of some of the subjects previously elucidated. The book is quite a credit to Nashville, and the school with which the author is connected.

WOOD'S HAND ATLASES, No. III. Atlas of Traumatic Fractures and Luxations, with a brief Treatise by H. HELFERICH, M.D., Professor at the University of Greifswald; with 166 Ilustrations, after Original Drawings by Dr. Jos. Trump. 8vo., cloth, pp. 142. Price of the series of five, $15.00. WM. WOOD & Co., Publishers, New York. 1896.

The excellence of the two preceding numbers, which we have had occasion previously to mention in the pages of this Journal, is fully maintained in the 3rd number of the series of Atlases. For the surgeon, this will prove a treat indeed. The clearness of the illustrations, so true to life and so correct, throw a flood of light on this department of surgical diagnosis and treatment. This volume, alone, is well worth the subscription price of the whole series, which in themselves, so far, have proven gems indeed of the printer's art. These works only need to be seen to be appreciated.

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A FEW OF OUR SUBSCRIBERS have not yet paid up their subscription. A little attention to this matter and prompt settlement will greatly oblige.

# THE SOUTHERN PRACTITIONER.

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*DEERING J. ROBERTS, M.D.,* - - *Editor and Proprietor.*

Vol. XVIII. NASHVILLE, MAY, 1896. No. 5.


## Original Communications.

### MEDICAL PROGRESS, ITS HELPS AND HINDRANCES.*


BY G. C. SAVAGE, M.D.,
President of the Medical Society of the State of Tennessee..


Medicine, like all other things terrestrial, had its beginning. When disease entered the world, medicine must have been born to meet it. Who first concocted a cooling draught to quench a fevered thirst must forever remain unknown. What the first surgical operation, and by whom performed, is likewise shrouded by the impenetrable gloom of the past. While I would not rob Hypocrates of the honor of being the father of medicine, in that he was probably first to reduce it to a science, nevertheless the generations who preceded him must have been blessed with men skilled to heal, in that they must have been cursed by disease. The depth and extent of their knowledge, measured by the aids

*Read before the Sixty-third Annual Session of the Medical Society of the State of Tennessee, held at Chattanooga, April 14, 15 and 16, 1896.

they had, must have been little; their skill to use the crude means for cure at their command, could not have surpassed their knowledge of disease. It may be that anciently, inspiration more than investigation made men strong in ability to cure. This generation may learn lessons in hygiene from inspired Moses, who lived and taught before Hygeia was deified.

But it is not my purpose to trace the progress of medicine from its small beginning, in the remotest past, to its present proud position among the great sciences and arts. It is yet an unfinished science, and as an art still imperfect, notwithstanding our multitude of remedies and our surgical appliances by the thousands. Medicine progressed, hindered as she was through many centuries by ignorance and superstition—her chiefest enemies. Within the present century the greatest progress has been made. That the march of medicine will go on until she shall stand a perfected science, I can believe, though this end may not be attained for many centuries to come. I believe the time is coming when the world will be redeemed from ignorance, vice, degradation and disease. Teachers, preachers, lawyers, and doctors will all have much to do in ushering in the millennium.

The reason medicine has advanced most within the century now about to close, is that she has had fewer hindrances and more helps. Superstition, which was an incubus on the chariot of progress in past centuries, dwindled almost to naught before the present century dawned. Ignorance, the mother of superstition, failing in her power to fully nourish her offspring, began to pass into her decline, her power to prevent progress greatly lessened. While the darkness of ignorance and superstition has not entirely disappeared, it has been rendered less potent for harm because of the accummulated light of knowledge with which the world is now flooded.

The conditions which hindered progress in the past, if existting, could hinder now. Unfortunately, some of them do exist, and it is equally certain that they have their retarding influence.

*Bigotry*, whether characterizing an individual or a class of individuals, in matters medical, never had other than a harmful effect. It would be well if this ill-shaped monster could be forever buried without hope of resurrection. Men who are not willing to accept facts presented by others, and will not weigh

the conclusions that have been based upon them, are the men who will not make advances themselves, nor will they be helpful to others who would. Destroy bigotry, and there will be no "pathies," but in their stead would stand one grand brotherhood of physicians. A medical bigot knows not enough to know that he does not know it all; and is, therefore, always ready to destroy anything that does not emanate from a source peculiary his own. Such an one would say: "I will not use this instrument because it was invented by a homœopath; I will not administer that drug because it was introduced by an eclectic; I will not bathe my fevered patients, not give them cooling draughts because this is the method of the hydropath; I will not listen to suggestions coming from the common people." The man who would attain to the greatest wisdom must gather grains of thought from all fields, must use his judgment in separating the good from the bad, and must be willing to feed his fellow-men from his well-filled granary. If Jenner had not listened to the stories of the milkmaids, vaccination would not have been discovered; and the era of immunization, inaugurated by Pasteur, but founded on Jenner's discovery, would have been longer delayed. We should never forget that all people are God's people, and that He may use one or another in bringing into the world the good which comes alone from Him. Away with bigotry, and send bigots with it.

*Jealousy*, although a personal property, can do a general harm. It is always a sign of weakness, and is usually directed against one who is stronger or gives promise of becoming so. Medical jealousy is a medical cur that rarely faces the one whom he would frighten, but watches for his opportunity to slip up from behind, and always with more bark than bite. A timid, though talented man, just entering the field of investigation, may become so frightened by the bark of jealousy as to flee the field and forever fear to enter again. Thus to the world may be lost results that otherwise would have followed. The medical man who is afraid of jealousy deserves pity; the jealous man merits only contempt.

*Laziness*, an inherited tired feeling, afflicts some men to such as extent that they neither accomplish anything themselves nor do they help others who would do something. This is a sort of

passive hindrance to progress, and it is harmful chiefly when it engages in idle conversation, one should be better employed. Of all professions and callings, the lazy man is least at home in medicine.

*Carelessness*, in more ways than one, may be the means of preventing progress. A careless reader can not get all that may be in the printed page; a careless observer can not properly interpret symptoms, and, therefore, may miss the mark in prescribing remedies. A careless man may have thoughts, but he does not note them, and they fly away, like a beautiful bird, to return his way no more. Such a thought, noted within the pages of a little book, recalled at a more leisure time by a glance of the eye, and amplified by the reasoning powers, might bring strength to the person and progress to the profession.

*Indifference* about medical matters and medical men is not calculated to give speed to the car of progress. One thus affected may answer promptly all calls from the sick and may relieve them from their sufferings. Every page he reads may bring him profit; every patient may be an open book from whose leaves he gathers useful lessons. He is content with these two sources of information, and what he gets he appropriates to his individual and exclusive use. He counts himself wise without knowing that he is foolish. He is of a few words, and, therefore, appears to be full of wisdom. He meets not with his brethren in medical societies for mutual improvement. His own thoughts he hoards as a miser does his gold. He is conscious of his strength, but he is only too careful not to impart it to others, either by word of mouth or printed page. When he dies the good he has done is buried with him.

*Exclusive Medical Organizations* are not promotive of progress in the fullest sense. In a science so broad, and with aims so high, narrowness in organization is an abnormality. The few who compose such a society may be the salt of the earth, but their savor is not so likely to be of service as if it were not thus enclosed. A holier-than-thou air emanates from a room containing such a coterie, and this is calculated to cripple the influence of the organization. To be *one* of *one hundred* has in it more sound than sense, and to be proud of such a distinction is more likely to hinder than it is to help the general progress. Such

organizations tend towards becoming mutual admiration societies; and the members sometimes may imagine that the great body of physicians on the outside look upon them with admiration and awe. An exclusive organization with a national name is a travesty. It would be far better to say "the *best* one hundred," or *the* one hundred," which would be a more modest way of putting it.

*Vanity* in a medical man is not usually well-founded, and is often unregulated. Such a vanity always harms the possessor, and is continually in the way of both personal and general progress. Competition is hateful to such an one, and without competition there can be no progress. If a man, by chance, has one thing that might excite his vanity, he doubtless has something else that should humiliate him. The peacock is proud of his feathers as he spreads them in the sunshine, but is humbled when he sees his feet; yet his feet are more useful to him than his gaudy tail. But prudent, well-governed vanity is a good thing, for with it competition is wedded, and the legitimate offspring of this union is progress.

*Common Prejudice* of all times, and *Laws* of some civilized countries, have been hindrances. Dissection, vivisection and experimentation, against which the multitude are prejudiced, are as essential to advance in medical knowledge and skill as light, heat and moisture are to the growth of vegetation. If there is any excuse for medical men in politics, it lies in the line of their preventing the enactment of laws that would lock the wheels of medical progress. At this moment the Congress of the United States is being urged by some, who think more of the lower animals than they do of mankind, to enact laws against vivisection in the District of Columbia. If they are successful in this, they will conclude that it is just as wrong to cut up a dead man as it is to cut on a live rabbit, and they will ask for laws against dissection. It would be but one step further for them to ask for the enactment of laws against administering medicines to the poor in hospitals, whose virtues had not already been proved on millionaires. Thus encouraged, they would leave Congress and go into our State Legislatures, and plead for the enactment of similar laws. If such laws should ever find their way into our statutes, a strict enforcement of them would

put an end to medical progress in this country. Let us hope that the men who make laws for us will not be so barren of brains.

*The Public* (not all the public), of whom *Preachers* (not all the preachers) form a part, may be the means of hampering medical progress by encouraging quackery, using vile nostrums, and endorsing quack appliances which bear high-sounding names. Serious ailments lead people to think only of men skilled in healing; slight ills, or imaginary afflictions, afford the opportunity to quacks and nostrum dealers to deceive the people, and while under the pall of this deceit they forthwith "certify." If there is a man whom the people deify it is the family physician, and yet they degrade him when they buy a bottled nostrum, visit a quack for free consultation, or wear about them a device that has more name and price than power to do good. Let the people frown on quackery and refuse to buy, then quacks will vanish and the nostrum trade will die.

HELPS.

Some of the specific aids to the medical advancement of the century now about to close may be mentioned:

*Anæsthesia*, local and general, has been given us, making painless surgery not only a possibility but a reality. While the hint for painless surgery was given more than six thousand years ago, when "the Lord God caused a deep sleep to fall upon Adam, and he slept," while the rib was taken from his side, it will always be a matter of pride to physicians of the South that Long, of Georgia, in 1842, was the first man to produce general anæsthesia, and to do painless surgical operations on sensitive human structure. It will likewise always be a matter of regret, on our part, that his modest nature and retiring disposition prevented his making public, except to a few medical friends, his great discovery, until, after a lapse of four years, Morton, of Massachusetts, announced his independent discovery of anæsthesia. It will always be our pride, as American medical men, to proclaim that our country gave anæsthesia to the world. Without this boon, surgery would have continued painful, and the great progress which has since been made would have been impossible.

Koeller, not then an American citizen, gave us Cocaine as a

local anæsthetic, in 1884. In paying homage to him now, in recognition of the good he has conferred on medicine by his discovery, we honor an American citizen, for he resides in Greater New York.

*Antisepsis*, the introduction of Lister, and its legitimate outgrowth, asepsis, have so lessened the former disastrous results of surgery that the surgeon has been made bold in his operative work. Because of these gains, untold suffering has been relieved; and, in innumerable instances, life has been prolonged. The greatest progress that surgery has ever known has been made within the last half of the nineteenth century, and the two factors that have had the most to do with this progress are anæsthesia and asepsis. A closer study of pathology and symptomatology have aided greatly in the march of surgery.

*Electricity*, once known only by its riding the storm, leaping from cloud to cloud, and occasionally sending its shivering lance to the earth through some giant oak, a thing of superstition and dread, has been tamed to serve the well and heal the diseased. When Franklin tapped the clouds with his kite, and brought the fiery fluid in a gentle stream down the slender cord to the key in his hand, he dreamed not, that in the nineteenth century, it would be made to light our streets and drive our cars. When Galvani saw the muscles of the dead frog contract and relax under the influence of this subtle agent, he had no thought to what uses it would be put by medicine and surgery ere the dawn of the twentieth century. When Crookes invented his tube, only a few years ago, he did not foresee that, by means of it, Roentgen would be able to make shadowgraphs of things hidden from the light of day. Electricity to-day is one of the invisible forces giving speed and effectiveness to the progess of medicine.

*Specialism* had its birth in modern times, and has been a most important factor in the advances that our science and art have made. Neurology became a possibility with Wilson's study of the brain, in the seventeenth century; but she did not grow to her present beautiful proportions until the men of the nineteenth century devoted their time and talents to perfecting the work begun so long ago. McDowell's boldness in opening the abdomen of his Kentucky patient led men to a more careful study of the pelvic and abdominal organs, and made gynecology

and abdominal surgery a possibility. Who does not admire the men in this specialty for their boldness in operative procedure, and their daring in the coinage of terms.

Helmholtz's invention of the ophthalmoscope, in 1851, created modern ophthalmology, and gave to medicine one of its most useful branches. It bears to-day the proud distinction of being more nearly founded on a purely scientific basis than any other department of medicine. Proud of her progress and position, she is humiliated only by the fact that gynecology, her younger sister, has far surpassed her in adding long and high-sounding names to the medical vocabulary. Other specialties might be mentioned that have done much in advancing medicine.

*The Drug Supply* of this century has had much to do with therapeutic progress. The mineral and vegetable kingdoms have been free in their gifts of remedies for human ills. Coal, taken from the bosom of the earth, has yielded her products for easing pain and reducing temperature. The cinchona tree, wrapped in her medicated bark, stood for centuries ready to give her antidote for malaria; but this power was unknown and unused until modern times. The oils and juices of a thousand plants have given to medicine their powers to destroy germs or neutralize their ptomaines. While much has been given for the asking, much more remains to yield disease-preventing and health-restoring power to the earnest, active searcher into nature's secret resources. On the mountain tops, on the sloping hills, and in the valleys of Tennessee there may be plants growing whose properties, if known and used, would surpass in power to prevent or cure disease anything that has ever been brought from any clime. How these secret forces may be extorted from nature's hidden grasp, and by whom they shall be given to medicine, remains to be seen. Some of our young men within the coming year may woo the forest and the field, and win therefrom something new that will be of service to the suffering world.

*Rivalry* in investigation is one factor in the march of progress. One possessed of this quality, like the mastiff, is conscious of his strength, and faces him whom he opposes. He imparts some of his own courage to his contestant. At the end of the contest right wins, and the late contestants should enjoy the results together.

*Energy* and *Industry* are more powerful in the life-work of a physician than are the circumstance of high birth and the environment of great wealth. The story of the lives of America's most noted medical men tell us too plainly that they were not born into the proud positions that they attained; and they were not wafted there by some gentle, uplifting breeze. At least one of the most noted medical men the South ever produced spent his earlier days on the old farm, among the pines of South Carolina. Fired with the thought that there was a greater work in a broader field awaiting him, he left the old home with only a few dollars in his pocket, and walked the weary miles that intervened between that home and the city of Charleston, that he might there commence his medical education. A less promising outlook could have hardly presented itself. His inborn capacity for work was not allowed by him to remain dormant, but his acquired habits of industry made of him the power which he became. Couple industry and capacity together, no mountain so high that it may not be climbed; no plain so wide that it may not be traversed. By such an one every opportunity is transformed into utility; every obstacle is brushed aside with the broom of determination.

If all the latent energy—the inborn capacity—of medical men could be transformed into manifest power, by the magic touch of the hand of industry, no cyclometer could record the revolutions of the wheels of medical progress.

*Medical Colleges* have aided in the progress of the past, are doing better work in the present, and will accomplish still greater good in the years to come. The medical schools of to-day are greatly in advance of those of even a decade ago; and the best schools of one hundred years ago are as nothing in comparison with the most advanced schools of to-day. If the medical colleges of the past, with their limited facilities for imparting instruction, turned out men who grew to be giants, what ought the schools of to-day do? Men towering above their fellows in medicine in past centuries were few, and because of their fewness they attracted the greater attention. Larger medical giants, but more of them, are found in modern medicine. They attract less attention than in the past because they are so much more numerous. Our great men of to-day far surpass the greatest of other cen-

turies, both in the depth and extent of their knowledge and in their power to apply it. Graduates of a few weeks ago know more of medicine than Galen ever dreamed of.

While medical colleges are still not perfect, and should be improved on many lines, a greater care should be exercised in scrutinizing applicants for admission. A man to enter on the study of medicine should have much of the quality known as "mother wit," or common sense; he should be trained in literature and the sciences, at least up to the point of development of his thinking powers; not only should he be mentally sound, but he should also be morally pure; and he should feel towards medicine somewhat as Paul felt when contemplating the ministry: Woe is me if I practice not medicine. No young man should be encouraged to wield the surgeon's knife or dole out doses for disease who is better fitted by nature and acquirements to tend sheep on the hillsides, or herd cattle on the plains; to build houses for the people to live in, or make clothes for them to wear; to construct cars for commerce, or man ocean steamers. There are a thousand and one callings in life ready to honor men, and from which men can get honor if they faithfully follow them.

*The Medical Society* is one of the most powerful factors of personal and general progress. Its existence pre-supposes that the members have accomplished all that is required of them in the prescribed course of a medical college. There may be ever so much fire in flint, yet without friction it cannot be called forth. The medical society is designed to bring out the fire of thought from the reasoning centers. The ideal medical association probably never had an existence, and yet it is a possibility. It is not my purpose to depict a perfect organization. The chief design of every medical society should be the advancement of knowledge and the enhancement of skill. Its doors should be wide open to all honorable members of the profession in the territory it covers. Bigotry and envy should not only not be placed to guard those portals, but they themselves should be prevented from entering, because both are enemies to progress. The password should be "honorable medicine," and the motto should be, "we will walk peacefully together in the pathway of progress."

A rightly organized and properly conducted local society

contains the germ of power. Each member, like children of one family, feels at home, and basks in all the freedom and ease that the word home implies. They get training in this school that fits them for the college of the district or state society, where they may find even broader and better opportunites for advancement. The smaller organization should bear a definite relationship to the larger, and their workings should be harmonious. Both should be governed by laws having in them the same spirit of progress. Continuing in training in the local and state societies, every honorable medical man should join his powers with those of his fellows in perfecting the national organization. What a power these several organizations would become if only their full importance was appreciated by all members of the profession and by the laity. Some good but misguided men will not attend medical meetings. One does not often read in the obituary of such a man that he invented a lever for lifting the world of medicine to a higher plane. The immediate duty a physician owes to the public will often prevent his attendance at medical meetings; but when he can attend, and does not, he fails in the performance of a duty he owes to the public, to the profession, and to himself. May the day speedily come when medicine can claim an organization in every city and county; when state societies shall have on their roll the names of all members of every local organization; when that grand body, the American Medical Association, shall be constituted of all the members of all the state societies.

*Medical Journals* are streams of water for irrigating the garden of thought. The vitalizing fluid of the profession is continually coursing through the pages of our periodic literature. Sometimes this stream is poisoned by the plasmodium of egotism, which now and then gives the reader a chill; sometimes it is made to lose its strength-giving power by the germs of the envious or the spores of one gifted in ridiculing. With all their faults journals are a necessary factor in the progress of medicine. If they were fewer in number they might be better. If those who imagine themselves gifted with editorial powers were really thus endowed, journalism would be on a higher plain. Fortunately the law of the survival of the fittest is continually doing its work. While a man is expected to buy the journal he reads,

he is not compelled to read all that he buys. The wise reader separates the trash from the treasure, and appropriates only the latter. One of the duties of the editor, which is too often neglected, is to refuse the bad and infuse the good. He must read all that he would publish, and should always have the courage to endorse the true and condemn the false. This he can do in editorial or in head-line. At a feast, the host cannot equally commend all the viands he may place before his guests, but his action would be condemned should he set before them a dish he might know to be dangerous. But after all, the mental pabulum offered in medical periodicals is made up largely of contributions from subscribers. How much better would these contributions be if the prime object in presenting them was the making of leaves, in medical literature, for the healing of the people. The mission of the medical journal will not be brought to an end until medicine shall stand a perfected science.

*Books* are as essential to medical life and activity as bread is to physical force. Books may be poor in matter and style as bread may be bad in quality and kind. As bad bread brings physical discomfort and predisposes to physical inactivity, so a poor book depresses mental power. Discretion in the buying of books is a necessity; the buying and the reading of good books tends only towards advancement. A good book is a store-house in which is garnered the good and the true of the past and the present; a treasure-house from which all may draw without danger of exhausting. Of the making of books there is no end. Even one's enemy may write a book, if so to him, of course, the book would be a bad one. While the profession cannot limit the making of books it is fortunate that it can control, to a large extent, the sale. Unprofitable books die with the first edition unexhausted, bequeathing to their authors no estate. The truths contained in good books will endure while time lasts. An individual book may not reach many editions, but their contents in some other form will extend across the stretch of time, and will always add to the speed of progress.

*Enthusiasm* has always been and will always be the spirit of progress. Its correct meaning is not always in the mind of the man who uses the word. The term crank or maniac would aptly apply to some who are mis-called enthusiasts. If we mean what

we say, when we call a man an enthusiast, when before him we should have a feeling akin to that which possessed Moses when he stood before the burning bush, for he knew that God was in it. Not less certainly is God in the genuine enthusiast, burning within him, but not consuming him, a marvel to angels and men. It was in the power of Moses to have laughed at the bush ablaze, and to have walked from it with covered feet; but if he had so acted he would never have learned the lessons that made him the leader of his people, and the framer of laws for the nations of all time. The wisest as well as the humblest may learn lessons from the enthusiast that will be both helpful and enduring. Deliver medicine from cranks and maniacs who can but retard her progress, but give her more men who believe that God is the author of all truth, and that for the general good of mankind he sometimes takes up his abode in a man, firing him with an almost consuming zeal. When studying the firmament of medicine, would that we could all cry out with the astronomer, as he gazed upon the stars, "O God! I am reading thy thoughts after thee." The plan of redeeming the people from disease is of divinity as is the saving of their souls from damnation.

The general progress in medicine is only the sum total of the progress of individual medical men. Throughout the history of medicine there have been men who created epochs and inaugurated eras. Harvey's discovery of the circulation of the blood was an epoch, prior to which medical thought groped in an uncertain light. The era of rational medicine dawned when Harvey enunciated the result of his investigation. The wonder has never ceased that the circulation of the blood remained so long unknown. Jenner's discovery of vaccination marked an epoch, but the era of immunization starting with it, continued in its morning twilight until the work of Pasteur caused it to break forth into the brightness of day. The noon-day of this era has not yet arrived. Throughout the coming centuries men imbued with the spirit of Pasteur's work, will go on investigating with the microscope and test tube, until, in due time, the people who will, may become immune from disease.

The medical world stood still when told the story of McDowell's daring, and she has not yet recovered from the astonishment excited by the brilliancy of the era of abdominal surgery, which

he inaugurated. The wonder will never cease, that for so many centuries, appendicitis and ovarian growths were permitted to send their victims trooping to an untimely grave, because of the unfounded fear that a puncture of the peritoneum meant death to the victim.

Thus we might speak of scores of epochs, and the eras that have followed them. The men who moved in these matters simply uncovered principles as old as creation. The streams which they tapped, when opening these well-springs, had always been connected with the great ocean of truth, and were only just beneath the surface. Thirsting for these waters, God-guided, they dug deep enough to find them. Medicine and the world have been made richer by their labors.

Not all the hidden streams of truth have yet been found. May it be the happy fortune of some who hear me to open up new fountains for refreshing the world.

Do we look longingly to the proud position of men who have attained eminence in medicine, without a thought of the rugged pathway they had to travel? We could not enjoy the one if we would shrink from the other. Men must labor to climb, and wait to reach, the mountain-tops of greatest usefulness.

Throughout the centuries medicine has been building her own monument. Before Harvey, the work done only served to clear the ground and prepare the foundation. The corner-stone of the superstructure is Harvey's discovery. Stone after stone has been added as discoveries have been made. As each tier stands completed, there is room for fewer stones in the one to follow. Some unenduring stones have been placed, but they have served to let the building go on. The rain of observation, clinical experience, and legitimate criticism will cause the inscriptions on unsound stones to fade away and the stones themselves to crumble. Other workmen will be ready to remove these, and in their places put material that will be more enduring. Some inscriptions will grow dim from the accumulated dust of neglect, but some one will come along, and with the breath of enquiry will blow the dust away and will make the reading clear and sharp again. The work of building goes on, some of the workmen preparing stones to place in the superstructure, but the great majority furnishing the uplifting power of encouragement and the cement of

coöperation. The time will come when this monument will be ready for the placing of the capstone. This ceremony commemorating the final discovery necessary for making the science of medicine complete, will be performed as the millennium dawns, amid the applause of a world redeemed from disease.

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## THE DEVELOPMENT OF MEDICAL EDUCATION—COMMENCEMENT ADDRESS.*

BY WILLIAM L. DUDLEY, M.D.,
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In giving a history of the development of medical education one must necessarily deal with the works of a few master minds, whose researches have opened the way to new fields, new methods, new results, and new principles, which have made possible the wonderful advances which have taken place in medical science. During the present century the progress has been far greater than that made in all time previous. This is the scientific age; the era of natural science. Speculation is thrown aside, and in its place we have substituted observation and reason. Hypothesis and theory do not now control scientific thought, but guide it. Superstition, and doctrine, and dogma may influence the ignorant and the weak, but they form no part of the mental fabric of the scientist when he deals with nature. The "scientific method" has made this age what it is. Careful study in nature's wonderful laboratory, observing with the greatest accuracy all of the interesting and intricate phenomena and processes which she generally unfolds to us, and using our reasoning power after collecting a multitude of facts, constitutes the "scientific method." Medical science has breathed the spirit of the age, and has kept pace with chemistry, physics, and astronomy. The poem of Homer indicates that medicine had a long and honorable history in his time. Then medicine was kept quite distinct from religion, although some superstition prevailed as to the healing properties of some sacred spring or holy shrine.

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There was also a slight distinction between the physician and the surgeon.

Hippocrates, who may be considered the founder of the true method of clinical medicine, had an exalted and correct idea of the high office filled by the physician, setting forth clearly and forcibly the duties and responsibilities pertaining thereto. The celebrated "oath of Hippocrates" is "equally free from the mysticism of a priesthood, and the vulgar pretensions of a mercenary craft." We, in this enlightened age, are still afflicted with the presence and influence of the medical prestidigitator who claims to have more or less divine power, while the mercenary physician thrives remarkably well, when considered from a commercial standpoint.

In the Hippocratic school little anatomy, physiology, and pathology were taught. The amount of science known then was necessarily very small, but the "scientific method," as far as it went, was the distinctive feature of this system. The Alexandrian school improved on the Hippocratic in a decided way by amplifying the importance of the study of anatomy. In the early Greek writings only vague hints are to be found as to the dissection of the human body as a means of instruction, while the Alexandrian school laid great stress on this method of teaching, and there is no doubt that vivisection on human beings was practiced by the anatomists, the criminals condemned to death being turned over to them for that purpose.

Rome never had at any time an independent system of medicine. They made great boasts and possessed men of great oratorical power in setting forth their own greatness. They did not believe in the Hippocratic maxim that "art is long," and a fair type of their teachers may be found in one of their most distinguished physicians, Thessalus, of Tralles, who professed to teach his pupils the whole of medicine in six months. Unfortunately we find in the profession to-day, pretenders of this character, men who are distinguished and learned, if we measure by the size of their "practice." Unfortunately the eyes of the suffering public are too easily blinded by the glitter and glamor of vain show in action and word, on the part of men who manage to keep within the pale of medical ethics, when they really belong to that equally prosperous class com-

monly known as the "quack." The "quack" is morally his superior, because he does not prosecute his business under false pretenses. The "quack" educator, like Thessalus, we also have with us. He does much more harm than the "quack" doctor. The latter imposes on his patients only, while the "quack" educator turns loose upon the helpless and confiding public hundreds of ignorant doctors, who slaughter the multitude in the name of science, a much more unholy warfare than the battles of hostile nations, because in it friend and foe alike are slain. In Arabia, schools of medicine rapidly developed with the rise of the Mohammedan Empire. They followed in the main the Greek school, and developed many strong men, of whom Galen is the best known at the present time. He was devoted to anatomical and physiological research, and desired to show the wisdom of the Creator in making everything to fit its purpose, and to aid in the diagnosis of disease. The classical period in the Arabian method began in 925 with Rhazes, who first accurately described small-pox and measles, and wrote comprehensive treatises on medicine Mesua, the younger, of Damascus, wrote a materia medica which passed through many editions, and was made the foundation of the first British Pharcopœia, issued during the reign of James I.

During the middle ages medicine made practically no advance. The noble example set by the physicians of Greece was not followed, and the scientific thought which began to develop with such brilliant promise was warped, stunted, and even supplanted by doctrines which were bred of ignorance, superstition and religious fanaticism. All science suffered from these same influences until the enlightenment of the century in which we live, burst asunder the shackles and made possible the wonderful progress which has given such a rich heritage to the present generation.

In Europe, from the fifth to the tenth century, the chief seat of learning was the monastery, where medicine was probably saved from total oblivion by the preservation of the literature, although the science was not advanced. In the fifteenth century there was a revival of learning, which though weak and flattering, resulted in a little progress during the next two hundred years, but even in the sixteenth century the standard of

excellence of the medical writings was far below that of the ancient authors. During this period, however, we may mark the introduction of clinical teaching which was first adopted in Italy at the medical school in Padua.

The discovery of the circulation of the blood by Harvey, marks the seventeenth century in medical history, but in spite of this glorious contribution to science, it contributed little to the immediate development of medicine. This was the age of "isms" and "pathies" with which we are afflicted, to a considerable extent at present. This was the age of the false philosopher, who based his theories and doctrines on the vagaries of the mind. The influence of Bacon's scientific method was nil.

In the seventeenth century the great English physician, Sydenham, enriched medicine with a "method" which was more valuable than any particular discovery he made. The principle he laid down was to study diseases carefully, and put aside hypothesis and pre-conceived notions. He laid stress on the healing power of nature, and recognized many diseases as being "specific." In the meantime, the great anatomists, physicists, and chemists like Willis, Borelli, and Boyle, were laying the foundation of scientific medicine.

The eighteenth century gave us Edward Jenner, whose researches on that dread disease, small-pox, resulted in one of the greatest discoveries known in medical science—vaccination. The disease was then a horrible and universal plague, and the discovery of immunity resulting from vaccination was hailed throughout the world as the greatest of all blessings that had been bestowed upon mankind by man. But there was more in the discovery than Jenner ever dreamed of. He had laid the foundation of the great principle—*immunity by inoculation.* This century may also be credited with a diagnostic method which has proved of incalculable value, for it was in 1761 that Avenbrugger, a Vienna physician, invented the method of recognizing diseases of the chest by percussion.

The spirit of scientific research has had full sway in the nineteenth century, especially in the latter part. I have not time even to enumerate the researches and discoveries which have led so rapidly to our present state of knowledge. I will refer briefly, however, to Pasteur and Lister, as two men whose

works stand preëminent among medical researches. Pasteur has done more for the science of medicine than any man who has ever lived. No man has ever given mankind so many gifts. He was educated as a chemist, and is renowned as a biologist. Until 32 years of age his work had been in the line of molecular physics and crystallography. In 1854 while serving in the official capacity of Dean of the University of Lille, which is situated in the midst of the great wine producing section of France his attention was naturally called to the nature and origin of fermentation. The result of his investigation was the important generalization that all fermentation was due to the presence of a living organism. Without the organism there could be no fermentation. He also found that the different kinds of fermentation were due to the presence of different organisms. Here we find the foundation of that great and all important science of bacteriology. His researches in fermentation accomplished another great service for science in exploding the theory of spontaneous generation which was constantly an annoyance to the scientific world at that time. The silk-worm disease—pebrine—had been for some years gradually destroying the silk industry, which was a very important one in France. In 1865 Pasteur was called upon to investigate it. He found a micro-organism to be the cause. He showed how this organism could be identified by the microscope in the moth, in the egg, and in the worm. He proved that healthy moths laid healthy eggs, which produced healthy silk-worms, and that unhealthy moths had unhealthy progeny, the principle of heredity. Here we have the origin of the greatest theory in medical science—the germ theory of disease. He made a thorough study of anthrax, and found the disease to be due to a living organism; likewise fowl cholera was carefully investigated with similar result. With remarkable skill he cultivated these germs in suitable media, and made the remarkable discovery that they lost these virulent characters after repeated cultivation, and when animals were inoculated with these attenuated germs the result was immunity from the disease. This explained the principle of vaccination. His last research, which is of great importance to medical science was his work on hydrophobia. In spite of much criticisms to which the crowning labor of his life subjected

him, statistics show that his observations are correct, and his treatment a triumphant success. Any one of the many great discoveries of Pasteur would have made him illustrious.

Lister, an English surgeon, first saw the important bearing which Pasteur's discoveries had on surgery, and he invented the antiseptic method which has since been modified to the aseptic method. This was a great advance in surgical methods, and has made possible operations, which previously could not have been attempted with any hope of success. Now almost any organ and any cavity of the human body can be penetrated by the surgeon's knife with little more risk than that incurred in the amputation of a finger. The surgeon who now neglects the slightest detail in rendering the conditions under which he performs an operation aseptic, is a criminal or an ignoramus. Unfortunately there are some physicians at the present time who do not believe in the germ theory of disease, and there are still people who do not believe the earth is round. These individuals all belong to the same class, and I am sure it is not necessary for me to name it.

In Great Britian and Europe the time required to complete a medical education varies from four to seven years, and the requirement for admission to the medical course is about equivalent to a classical scientific degree in our best colleges. In the United States the medical course extends through three or four years, and the requirement for admission is usually less than that required for entrance upon a classical or scientific course in our best colleges. Thus, it will be seen, that our standards are considerably lower than the European, but it is a pleasure for me to say that the requirements in the United States are being constantly raised, and it will not be many years before they will be as high as any in the world. Some medical men who are not progressive justify our lower standards by saying that we have as good physicians and surgeons in this country as there are in the world. This statement I grant, but it proves nothing. All who are informed on the subject know very well that the culture and attainments of the average European physician and surgeon are above that of the profession in the United States. It is the average man that we must elevate; the exceptional man will elevate himself.

In early times the student gained his medical knowledge by attaching himself to some practising physician, who acted as his teacher or preceptor, directing a course of reading, and from time to time discoursing upon some medical theme. The student picked up what learning he could, and some ventured forth on his own responsibility. Such was the state of medical education in this country until 1745, when Dr. Thomas Cadwallader began a course of instruction in anatomy, in Philadelphia. In 1752, Dr. William Hunter, of Newport, R. I., began a similar course, which lasted for three years. In 1765, the first medical college in the United States was started. It was located at Philadelphia, and was called the College of Philadelphia. The Faculty was composed of two professors; one of anatomy and surgery, and the other medicine. 1769, the Faculty had increased to five members, by adding professorships in materia medica and botany, chemistry, and clinical medicine. For admission, the applicant was required to show a knowledge of Latin; mathematics and natural and experimental philosophy was considered "requsite to a medical education." The course of instruction continued six months during each year, and after completing such a course satisfactorily, and attending the "practice of the Pennsylvania Hospital" for one year, the candidate was given the degree of Bachelor of Medicine, provided he had "served a sufficient apprenticeship to some reputable practitioner in physic," and had a general knowledge of pharmacy. For the Doctor's Degree, three years must have intervened from the time of taking the Bachelor's Degree. The candidate was required to be "full twenty-four years of age," and he had to write and publicly defend a thesis written in Latin.

The War of the Revolution arrested the development of medical education, but soon after its close various Colleges were incorporated, and the number has rapidly increased up to the present time. At first, the tendency was decidedly in the direction of a higher standard, and the rivalry between the Colleges was healthy, inspiring each to offer improved facilities and better instruction to attract students. The first step was an increase in the length of the term, from six months to eight or nine; but, after about thirty years, the Bachelor's Degree was abandoned and the Doctor's Degree substituted in its stead;

Latin and Greek were eliminated from the entrance requirements, and the Latin thesis was no longer required. In twenty-five years more the rivalry brought medical education down to a strictly commercial basis, and the interests of the students and the public were wholly lost in the unfortunate and unprofessional methods employed by the Colleges to gain students and, thereby, revenue. The annual College term was reduced to even twelve weeks, the entrance requirements were nil, and in many instances the examinations required for graduation were mere form. The student was required to listen to five or six lectures a day, besides attendance on clinics, if any were held, and his nights were given to dissection. Two such courses—mere repetitions—were required for a degree. This condition of affairs obtained, with the exception of a few, a very few Colleges, until about fifteen years ago, when the better element of the profession began to cry out against this deplorable state of affairs. Then, under pressure brought by the American Medical Association, the standard was raised at both ends of the course, and the subjects of instruction were arranged in some logical order, so that the student would not be required to listen to the same twice, but made to understand as he proceeded, and to give evidence of that fact by careful examination.

To force a student to hear the same lecture twice or three times was an insult to his intelligence, if he had any, and if he had none it ought to have been discovered before he had spent two or three years of his time, and wasted so much of his money. In the last few years, the length of the annual term has been increased to from six to nine months, and the number of terms from two to three and four.

Unfortunately, some Colleges still compete for students in a disreputable manner, and repeat the lectures in the old way, but fortunately, such institutions are rapidly losing ground, and those of high standard and thoroughly graded courses, are rapidly gaining.

The Colleges which are setting forth and maintaining the highest ideals in medical education are those which are endowed. Higher education can not be conducted on a money-making basis anywhere. The cost of instruction and interest on the equipment of a strictly modern college or university far ex-

ceeds the revenue from students' fees. The student who attends an unendowed professional school or college may get the worth of his money, but had he paid the same fees into the treasury of an endowed institution he would have gotten three or four times its value. To illustrate, I will say that Vanderbilt University pays out for actual expenses from three to four hundred dollars for each one hundred dollars received for tuition. The reason that the educational standpoints of Europe are so much higher than those of this country is that the European institutions are controlled and operated by the State, which provides everything needful in the way of instruction and facilities without regard to expense.

The first practical instruction in medical teaching was given in anatomy. The physician should know the structure and mechanism of the human body as the foundation of his professional knowledge. The idea of the dissection of the human body, in early times, encountered furious outbursts of public indignation, and mobs destroyed college property and threatened the lives of professors, alike in Europe and the United States. I am glad to say that such fanaticism is a thing of the past, although we have a similar craze among a class of people known as the anti-vivisectionists. I presume such people would prefer to suffer than to have their pain alleviated by the discovery of new remedies, or would they prefer to be experimented on themselves to relieve the feelings of the dumb brutes? I have never heard of a member of the Association offering to make the sacrifice. I am in favor of vivisection, but I am strongly opposed to cruelty to animals. There is a wide difference, and we must make the distinction. If those who oppose vivisection would decline to eat meat because animals had to be killed to supply it, they would have more of my sympathy than I can now give them. Vivisection is essential to the advancement of medical science.

The modern medical school must emphasize practical instruction in all possible lines. Laboratories for practical instuction in chemistry, pharmacy, histology, pathology, bacteriology, and physiology must be fully equipped, so that full courses of instruction can be given, not for a few weeks, but for the whole term. There must be no sham nor pretense about it—students

must be thoroughly drilled in physical diagnosis. A student may have had the physical characteristics of limestone and iron ore described to him repeatedly, and yet be unable to identify either until he had handled and observed them for himself. How can he therefore recognize the physical signs of health and disease, a task often most difficult, unless he has been taught by his instructor through observations made on a living subject? The class should be divided into small sections and constantly drilled in this difficult and important branch of medical education. In order to supply material for this purpose a free college dispensary is absolutely necessary.

The first free college dispensary was established in this country in 1787, at New York. Now each college has, or claims to have, one; but, I regret to say that in the South especially, our institutions have not considered this work sufficiently important to build up and retain a liberal dispensary patronage. This is unfortunate, and medical education has suffered in consequence. The free treatment, and free medicine, furnished by the dispensary is not only a great charity but at the same time it furnishes valuable material for the clinic.

Clinical instruction is an essential element in the modern course of instruction in medicine and in surgery, and all of the great medical colleges of the world make extensive provisions for this method of teaching. It is for the purpose of affording ample facilities in their method of instruction that Vanderbilt University, in the construction of the new medical department building, has provided such spacious waiting, consulting, and operating rooms; where patients can be examined, treated, and operated on in the presence of the student, who is made to give his opinion as to the nature and treatment of the disease, while he is criticized and corrected by the professor. This department was opened two and a half months ago, and three hundred and sixty poor people have had free treatment and free medicine, giving an abundance of clinical material.

Another substantial advance which has been made in medical instruction by the best institutions, is the substitution of recitations for the old time and unsatisfactory oratorical lectures. In the medical department, as in other departments of the University, the object of the professor is to teach and not to orate.

Students want to learn, and it is the duty of the professors to teach. It matters not how distinguished the physician or surgeon may be, if he is not a successful teacher he should have no place in a medical Faculty. Teaching is one of the grandest and noblest of professions, and it is the duty of every professor to cultivate the art of pedagogism to the highest degree.

It was with the determination, on the part of the Trustees and Faculty of Vanderbilt University, to give as thorough and complete a course in medicine as could be obtained anywhere in the world that they have constructed this magnificent building and adopted a course of study based on the ideas which I have hurriedly presented for your consideration to-night. No expense has been spared in erecting and equipping the building in which we have assembled to-night. The chemical, histological, pathological, bacteriological, physiological, gynecological, ophthalmological, surgical, medical, anatomical, and pharmacal laboratories are complete in every respect. The surgical amphitheater is a model of architectural and scientific construction. The lecture and class rooms are spacious, well lighted and ventilated, according to the most scientific principles. The dispensary and clinical rooms are conveniently arranged for the purpose for which they were designed, and they occupy one-half of the ground floor; and last, but not least, the library and museum are all that could be desired. Not only has the interior plans of the building been carefully considered, but the exterior is a model of architectural beauty, as you will all testify. After the close of these exercises, you are invited to carefully and critically inspect the structure, and I am sure that the most competent judges will testify that the authorities of Vanderbilt University have left little to be desired.

# Selections.

CAN ANTITOXIN STATISTICS BE RELIED UPON?—The many fiascoes in modern medicine have taught me a lesson, viz.: Never to be the first and never to be the last one to adopt a new

remedy. Liberality is one of the first conditions for progress and success in medicine; conservatism, the preventative for poetic illusions and errors, undiscovered on account of the binding effect of enthusiasm.

I have quietly watched the reports of cures of diphtheria with antitoxin, and have wondered how easy it is to catch the masses, even if one knows next to nothing about the *modus operandi* of a remedy. Besides, its origin and composition is a mystery as yet, its preparation being controlled entirely by a few enterprising chemists. But neither this nor the fact that its introduction into the human system is apt to cause a good many dangers like leucocythemia shall be brought as an argument against its value; even the fact that a good many eminent and thoroughly reliable physicians have reported their experiments with it as failures shall not be mentioned; only one modest question shall be asked: Can antitoxin statistics be relied upon? I dare answer no, not always. I do not doubt for one moment the honesty of the reporters and their noble intentions; for the sake of the honor of the profession, I will say that "figures will not lie." The fact is, that every case reported ss diphtheria is indeed not always true diphtheria. In some cases the microscopic examination alone was sufficient for a diagnosis, and that was false. In other cases the physical signs, the clinical picture was the medium, and that was false also. Both together, microscope and thermometer, eye and hand, must be employed to obtain a correct diagnosis.

Diphtheria, true diphtheria, in spite of horse, jackass or any other quadruped's serum, is a grave, constitutional disease, the prognosis of which is always doubtful. It is exaggerated when one of my friends asserts that he makes a diagnosis of true diphtheria post-mortem only; but there is some truth in that intended joke. There are plenty of poor children running around the streets with sore throats, follicular tonsillitis, rhinitis fibrinosa and never take a drop of medicine and get well. And in some of these a physician is called in, and a few hours later the health inspector is placarding the house. If, by chance, the parents are smart enough to call in a more experienced physician, off goes the red sign. I had quite a number of such cases in my practice, but in one of my last ones I had an encounter with our local board of health, which ended in my victory.

The case I refer to is that of a little boy, R. S., aged 4 years. He was taken sick with a sore throat and nose, the latter bleeding on touch, membranes being expelled on sneezing. A reputable physician was called who pronounced it diphtheria. He sent a culture to the local board of health where Klebs-Lœffler bacilli were found. For some unknown reason to me, the parents discharged the physician and called me in to attend the case. I made a careful examination of the nose and throat, found a somewhat accelerated pulse and a temperature below 100 degrees F. The boy ran from one room to another, and would not agree to be confined to bed. While the mucous membrane appeared to be, on the first look, diphtheria, a closer examination revealed the double malady of follicular tonsillitis and rhinitis fibrinosa. Both affections simulated diphtheria almost to delusion. The clinical picture of a grave constitutional disease, high fever, etc., which symptoms are a *conditio sine qua non* for a diagnosis of true diphtheria, were absent. On the other hand some authors have lately classified rhinitis fibrinosa with diphtheria, but the best authorities in the old and the new world strongly object to such classification. The argument that if the Klebs-Lœffler bacillus be found, the case must necessarily be one of true diphtheria, does not always hold good, as Baginsky and others have found the same bacillus in different forms of rhinitis and pharyngitis. While I must admit that not every case of diphtheria is associated with a high temperature, constitutional depression, etc., such is the rule without any exception in nasal diphtheria. After nose and throat have been sprayed with hydrozone there could be found no microbe in the culture taken the other day.

The number of cases of this kind which I have successively treated approaches closely to one hundred. If, according to the Board of Health of New York, Chicago, and other institutions, they ought to be styled diphtheria, well then, what is the use of injecting blood serum taken from some animal? We have in hydrozone (30 volumes aqueous solution of anhydrous peroxide of hydrogen) a remedy which not only kills instantaneously the Lœffler bacilli, but also changes chemically the nature of the soil in which their spores can develop. Its deadly action is limited to vegetable cells (pathogenic germs) and it is the most

powerful stimulant to healthy granulations, having no injurious action upon healthy animal cells. In fact, my experiment taught me that hydrozone is a safe and most reliable remedy to use in the treatment of diphtheria. On the contrary, I will say, How can we rely upon antitoxin?—Gustavus Blech, A.B., M.D., in *Jour. A. M. Asso'n.*

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CHOLERA INFANTUM.—A complaint peculiar to infantile life, too well known to need further description. I have been requested to give my treatment for this scourge of the nursery. I will not stop to give its pathology or morbid anatomy. What the profession needs is the simplest and mildest treatment that will relieve the little sufferers in the shortest time; one of which, at least, I hope to give.

The first five years I practised, I treated these cases as I had learned from the books and lectures. When my little patients died I wondered why they did not get well, for I knew my treatment was orthodox. When a poor, little emaciated one lingered through the summer and autumn, and finally got well, I knew it was despite both disease and treatment.

Among my patients was our own little Ruby, a bright, sweet darling of fourteen months, stricken July 2d. I exhausted the remedies laid down in the books and those in my memoranda taken down at college, then called to my assistance the ablest physicians available. They said I had done all they could do, and offered nothing new. One, a diplomat, said he had obtained the best results, in such cases, from the use of Mrs. Winslow's Soothing Syrup, advised me to try it and went away. In my despair, I cried out, "is this all?" Is this the end of all hope of assistance, in this hour of my great distress.

July 28th she ceased to be. We laid her away, and might well have written on her little monument, whose spire points heavenward, "Died early, because they knew not what to do."

Then I began to enquire of every doctor I met: "What is your treatment for cholera infantum or summer complaint in children?" They replied, "Opium, morphine, laudanum, paregoric, Doveri, cinnamon, cloves, allspice, nutmeg, kino, blackberry-root tea, white oak bark, raspberry leaf"—the whole cata-

logue of astringents—made into some form of powder, decoction or syrup. The same old, old treatment that has sent, and is still sending, multiplied thousands of lovely, innocent children to premature graves, that ought to be saved, and many of them would get well if they never saw a doctor, or rather, if a doctor never saw them. Hard words to say, but I have been over the battle-grounds; I have witnessed the last struggles; I have heard the weeping of mothers and friends, who anxiously watched for the last breath.

I have paid dearly for my knowledge. I am still in a position to look over the field, and read the results, and know whereof I speak. I had tested the treatments laid down in the standard works, and those given me by my teachers, and found disastrous failures. I had applied to professional gentlemen with whom I met, and some of them appeared to think they had about reached the top round, and, from them, learned nothing new under the sun. I was then, comparatively, a young man. I determined to pull out of the ruts made by that old professional cart, that went out from Philadelphia over one hundred years ago, and, if possible, blaze a way to the goal of my ambition, to relieve and save these little sufferers.

Under astringents, I found the inner coating of the stomach wrinkled and hard, like that of a chicken's gizzard; the small intestines the same, with occasional short spaces distended with gas. No digestion, absorption or assimilation could take place under such conditions. (If you will cut down here after death, gentlemen, you will find, after using your puckering treatment, a similar condition.)

I began to think for myself: There is evidence of irritation here, manifest at both ends of the line. First, by the vomiting, and second, the diarrhœa. What are the indications?

The answer is plain. First, control the irritation, and second, remove the cause. To control vomiting, one-eighth grain tablet of calomel every hour until four are taken. Follow with teaspoonful doses of castor oil, or pure olive oil, in which is mixed three to five drops of Battle & Co.'s Bromidia, every two hours, until it operates on bowels, and be sure that it *does operate, too.*

Then give every two or three hours from half to a teaspoonful, according to age and emergency, of the following:

R Aquæ Calcis... .... ..... .....1 ounce.
Misturia Cretæ..... .....1 ounce.
Syrup Acaciæ..... .....1 ounce.
Bromidia ..... .....1½ ounce.
Bismuth Sub Nit.....1½ drachms.

M. Sig.: Shake well before using.

Repeat the oil every morning *till it operates*, and follow it as before. If the Bromidia in this formula is not sufficient to insure quiet and sleep, I give enough of it in addition till it does, always properly diluted. In extreme bad cases, with "brain symptoms," I depend entirely on Bromidia, and it has never failed me. I have given it in half teaspoonful doses every hour till the desired effect, with no unpleasant results.

Observe proper rules of feeding and bathing and the little patient is usually all right in a few days. Since I have adopted and followed this course, now about twenty-five years, I have not lost a case of cholera infantum or summer diarrhœa, and my records will show that I have treated, probably, as many as any one in the same section of country.

I want to say here, that I have saved the lives of more children, of all ages, with Bromidia, than any other remedy I have ever used, and I have used it since it was first introduced. I would no more think of going among the little ones without a bottle of it than I would of going among the "Haw-eaters" of the Missouri Valley without a bottle of quinine. I know how many feel from what they write about so-called proprietary remedies, but "what I have written, I have written." "The proof of the pudding is in chewing the string," chew the string, gentlemen, and then tell us what you know.

When doctors learn that medicines never cure any disease, but may only remove the cause, that the system may restore itself, then there will be a great revolution in our medical armamentarium, and the manner of using, to obtain the desired results.—J. M. Duncan, M.D., in *Medical Brief*.

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HYDROZONE IN PURULENT OTITIS MEDIA.—On November 4th, 1895, I was consulted at my office by Robert P——, aged 24 years; occupation, laborer in Armour Packing Company.

The patient complained that for about four weeks he had been suffering from intense pain in his left ear, making it impossible for him to sleep at night, or rest during the day. The pain was so severe that at times he apparently lost consciousness, and it seemed to extend through his entire brain. Upon inspection, the man's face was found terribly deformed; an edematous swelling the size of one-half of an ordinary loaf of baker's bread occupied the usual location of the ear and the surrounding muscles. The auricle of the ear was almost buried in edematous tissue; upon palpation, the part was found intensely tender, and deep pressure evoked expressions of excruciating pain. The integument and subcutaneous tissue were thoroughly infiltrated. Ichorous, fetid pus was slowly exuding from an almost imperceptible meatus. The patient expressed feelings of chilliness, showing a possible septic contamination of his system. Every indication and sign pointed to possible suppuration of the mastoid cells—tenderness upon pressure over the mastoid being very marked. Efforts to localize the tenderness, whether in external meatus or mastoid, for discriminating diagnosis, were unsatisfactory. I concluded to withhold a positive diagnosis as to whether the condition was purulent otitis media or suppurative inflammation of the mastoid, and used tenative treatment for a short while. I immediately placed the patient under heroic doses of elixir of the six iodides internally. After laborious effort I succeeded in separating the edematous tissue sufficient to admit the introduction of a small Eustachian catheter into the external meatus. Through this, with a small hard rubber syringe, I injected four times daily about one-half an ounce of hydrozone, allowing it later to drain away, advising hot fomentations. The patient was confined to his bed and the best possible hygienic surroundings provided. In twenty-four hours after the treatment was commenced, the intensity of the odor, amount and character of the discharge had manifestly lessened, the swelling was reducing and the patient feeling better. The edema being lessened, the aperture was enlarged. I now recommended the injunction of hydrozone through a catheter of larger calibre, every hour, requring the head to be kept turned to the opposite side for ten minutes to allow the percolation of the hydrozone as deeply as possible into the middle ear, before

reversing the position to allow drainage. We continued this treatment for a week, the man's recovery progressing with remarkable rapidity, his pain and the constitutional symptoms having disappeared about the third day. At the end of eight days the swelling had entirely disappeared, his features were again normal, and he expressed himself as perfectly well. An examination showed a circular perforation in the ear drum the size of a shot, proving that the case had been one of purulent otitis media with septic contamination of the patient's system, and infiltration of the surrounding cutaneous tissues. Small incisions were made at two different places to permit the exit of pus from the integument. The mastoid was found not involved. The rapidity with which the disease yielded after the introduction of hydrozone through the catheter into the middle ear impressed me with the wonderful value of the preparation; for, struggling with such cases during a practice of seventeen years, I have never seen its efficiency equalled by any medicinal or operative procedures.—*Wm. Clarence Boteler, M.D., in Med. Bulletin.*

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THE DR. L. CH. BOISLINIERE PRIZE ESSAY FUND.—At a general meeting of the Medical Profession, held on January 13, 1896, a committee was appointed to determine upon and institute some suitable memorial in honor of the late lamented and revered Dr. L. C. Boislinere, and to solicit subscriptions from the public at large, in order to properly accomplish this object.

After mature deliberation and free discussion, both in and out of the committee, as to the shape this memorial should take, it has been determined to found a Boislinere Prize Essay, on some subject connected with obstetrics and gynecology, the award to be made triennially and to be open to the competition of regular physicians residing in the United States.—*Med. Review.*

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WHAT IS THE FUNCTION OF THE OMENTUM?—This often-asked question is thus answered by Byron Robinson, the eloquent author, profound pathologist, and briliant surgeon:

"The omentum is like a moving sentinel, whose beat extends over the whole peritoneum to guard the invasion of infectious

foes. Its method of defense is to build forts of exudates, which not only act as barriers against the microbe hosts, but bury the slain of the battle, and starve the remaining ones within circumscribed prison walls."

Let us suggest another function for the omentum—an obvious one. It serves to keep the intestines warm. When the skin becomes chilled, a largely increased supply of blood goes to the omentum, containing as it does an immense number of very dilatable vessels, and, the intestines are protected against cold by an additional barrier resembling a hot water bag.—*Southern California Practitioner.*

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To Remove From the Hands Odor Acquired in Making a Post Mortem.—Every physician who has had occasion to make a post mortem examination is familiar with the peculiar cadaveric odor which clings so tenaciously to the hands. Those also who have treated uterine cancer know the sickening odor of the vaginal discharges and how impossible it is to wash it from the hands. In such cases, the hands should be washed thoroughly with warm water and soap, and then listerine applied full strength. If listerine had no other use than this it would be of great value, but beside this, it is of inestimable value as an antiseptic, either internally or externally.—*Mass. Med. Jour.*

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What is Indicated by the Tongue.—A white tongue indicates febrile disturbance; a brown, moist tongue—indigestion; a brown, dry tongue—depression, blood-poisoning, typhoid fever; a red, moist tongue—inflammatory fever; a red, glazed tongue—general fever, loss of digestion; a tremulous, moist, and flabby tongue—febleness, nervousness; a glazed tongue with blue appearance—tertiary syphilis.—*Medical Age.*

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The Treatment of Sciatica by Compression.—In an abstract of an article from the *Bulletin medical de Paris*, which is published in the *Lyon medical*, the writer states that M. Negro has reported a hundred and thirteen cases of rebellious sciatica in which this new treatment has resulted in recovery. The procedure is as follows:

The patient lies on his face with his legs extended and resting easily one against the other. The most painful spot is selected, the region where the nerve proceeds from the large sciatic opening. On its trunk both thumbs are applied and it is compressed with the greatest possible force; at the same time slight lateral movements are made without changing the point of pressure or moderating its intensity. This takes from fifteen to twenty seconds, and is followed by an interval of twenty minutes' rest, when the procedure is repeated. After a second application, which is much less painful than the first, the patient is able to walk, and for several hours, or even a day, he may be free from pain.

In order to obtain complete recovery, says the author, this procedure should be practiced about six times a day every two days, until the definite suppression of the neuralgia is obtained. *N. Y. Med. Journal.*

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and report of cures effected at the clinics of the Universities of Bonn and Griefswald, Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

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FUNCTIONAL IMPOTENCE.—Here one usually has to deal with a condition in which the sexual apparatus is being constantly excited and irritated, and constantly the reflex centre in the spinal cord is never at rest. Therefore, in treating such cases, do not begin by putting the patient on aphrodisiacs (as phosphorus or damiana), but adopt a line of treatment that will soothe

and tranquillize, and stay the patient's more or less morbid desire to accomplish sexual intercourse. I prescribe potassium bromide twenty grains, with tincture henbane twenty minims, in four drachms of camphor-water, four times daily. After employing this for two weeks (or longer if necessary), and its purpose having been attained, it is then, in the case of a married man, permissible to begin tonic aphrodisiac treatment. I find of special value, given four times a day, $\frac{1}{61}$ grain strychnine sulphate dissolved in equal parts distilled water, and dilute phosphoric acid.—*Doctor Lindsay, in Cincinnati Medical Journal.*

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Diet in Chronic Heart Diseases.—It is important to restrict the amount of liquid ingested by patients with heart disease. This alone suffices to bring about compensation, and in many cases in which such drugs as digitalis are beginning to lose their power the heart action is kept up by making the liquid ingesta correspond to the excretion.—*Glax, in Weiner Medizinische Presse.*

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Mustard as an Antiseptic.—Dr. Roswell Park (*Canadian Practitioner*, January, 1896) remarks: "I have endeavored to call attention to the remarkably efficient properties possessed by mustard as an antiseptic or sterilizing agent for the surgeon's hands, and for the skin of the part to be operated upon. One never goes into a house, or at least a locality, in which mustard cannot easily be procured, and my custom is to thoroughly rub and scrub my hands with a mixture of green or other soap, cornmeal, and mustard-flour, for about five minutes. After rubbing thoroughly into all the crevices and creases of the hands

and nails by aid of a nail-brush, one may be absolutely certain that his hands are sterilized, no matter what he may have been doing previously. I have no hesitation in proceeding from an autopsy to the operating room, if I may thus protect my hands. Used as indicated, the mustard leaves no unpleasant sensation; and one may feel that by the time it produces unpleasant tingling or rubefaction of the skin its essential oil has done its desired work as an antiseptic. I have discarded all other means of preparing the hands, and in several years' use of mustard in this way have never been disappointed, nor had the slightest reason to question its effectiveness. I might add also that it is an admirable deodorizing agent, and will take away from the hands all offensive odor of dead or dying tissues, all redolence of iodoform, etc.—*Medicine.*

# Editorial.

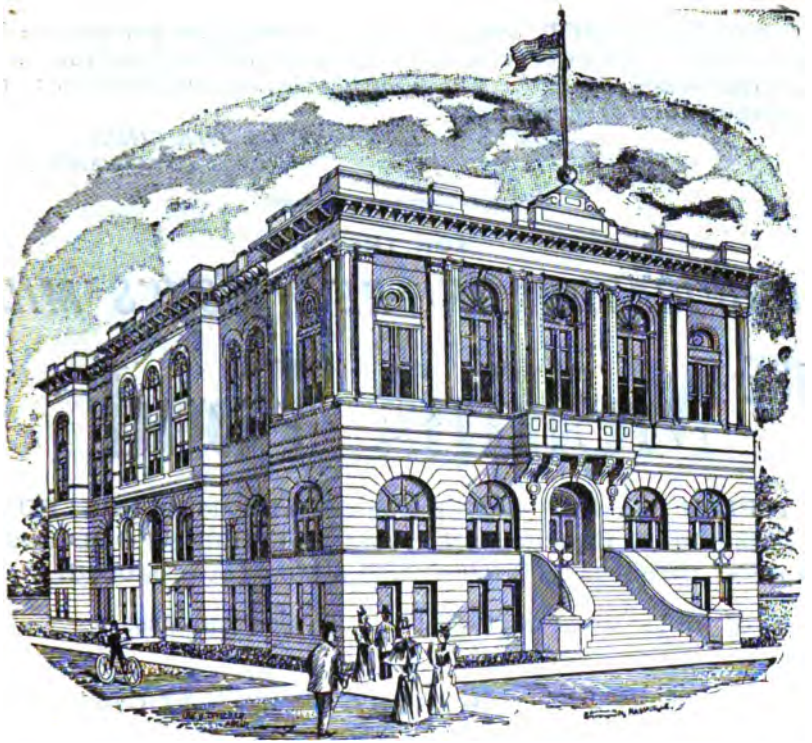
## THE SIXTY-THIRD ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF TENNESSEE.

Was held in Keystone Building, Chattanooga, April 14th, 15th and 16th. The meeting was called to order Tuesday morning at 10 a. m., by the President, Dr. G. C. Savage. Addresses of welcome were made by Mayor Ochs and Dr. G. A. Baxter, responded to by Dr. J. S. Nowlin.

The President submitted the following recommendations, which were submitted to a committee composed of three members from each grand division of the State, to report at the next annual meeting:

1. The establishment of a Library, to be located in Nashville, and to be owned and controlled by the State Society, and placed under the supervision of a librarian.

2. The establishment of a Medical Journal, to be owned by the Society, and controlled by a board of five trustees, the latter to consist of ex-presidents, who shall serve for four years. The first board should consist of the last five ex-presidents, the oldest to serve one year; the next oldest, two years; the next, three years; the next, four years; and the last, five years. In the event of the death of an ex-president, the vice-president from his division of the State shall serve in his stead for the unexpired term. The editor and business manager should be elected by this board, for an indefinite period of faithful and efficient service, and on such a salary as the income of the Journal would justify. All



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G. C. SAVAGE, M.D., Professor of Ophthalmology and Diseases of the Ear, Throat and Nose.

DUNCAN EVE, A.M., M.D., Professor of Surgery and Clinical Surgery.

J. A. WITHERSPOON, M.D., Professor of Practice of Medicine and Clinical Medicine.

THOMAS MENEES, M.D., Professor of Obstetrics.

GEORGE H. PRICE, M.D., Professor of Physiology.

O. H. WILSON, M.D., Professor of Anatomy.

ROSS DUNN, M.D., Professor of Materia Medica and Therapeutics.

W. M. LATE COPLIN, M.D., Professor of Pathology and Bacteriology.

J. R. BUIST, M.D., Clinical Professor of Nervous Diseases.

W. FRANK GLENN, M.D., Clinical Professor of Genito-urinary Diseases.

Numerous lecturers and assistants have been appointed.

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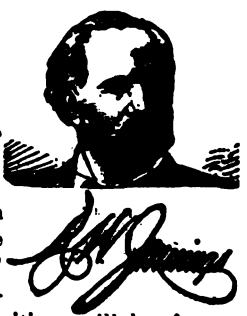

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papers presented to the meetings of the Society should become the exclusive property of the Board of Trustees. The pages of the Journal should be open to all members and the profession at large for the discussion of medical matters. Every member should be entitled to the Journal.

3. County or Local Societies should be organized in every County in the State, and admission into the Local Society should also constitute membership in the State Society. Each member should pay his annual dues to the State Society, thus paid should be remitted quarterly to the Treasurer of the State Society. Papers read and discussions had in local organizations should become the property of the Trustees of the Journal. Moneys coming into the treasury of the State Society should be paid out only on the order of the Trustees, or some one authorized by the Trustees to act for them, and that one should himself be a member of the Board.

4. The State organization having thus been perfected, the Annual Meetings should all be held in the Capital City of the State, as are all the meetings of political parties and secret organizations.

5. The membership of the State Society should consist of two classes: First, Permanent members who should be entitled to all the privileges of the Society except those pertaining to the transaction of business not of a scientific nature. Second, Delegates, one to be elected annually by each Local Society, whose duty it should be to transact all business, including the election of officers. The actions of this committee should be final and never be referred to the general body. In the general body these delegates should have all the rights and privileges of permanent members, which they are.

6. The permanent members should be divided into sections. Each section should have its Chairman and Secretary. The Chairmen and Secretaries should compose the Committee on Essays. These, as all officers, should be elected by the business committee. The papers of all the sections should be read before the general sessions, for the general good. Business eliminated from these sessions, an immense amount of scientific work would be accomplished within the three days of the session.

7. If these matters are to be considered, they should be referred to a committee of nine—three from each division of the State—with instructions to re-write and arrange anew the Constitution and By-laws of the Society, and report at the next annual meeting. This report should be printed and mailed to all members of the Society at least one month in advance of the next meeting.

The reading of papers on various subjects followed, and the greatest interest was manifested troughout.

The first paper on "Vaginal Hysterectomy," by Dr. T. J. Crofford, of Memphis, elicited much favorable comment.

A paper by Dr. B. B. Cates, of Knoxville, on "Fractures of the Upper Extremity of the Radius, With Cases," was discussed at length, Drs. Baxter, Thornton and Winston speaking on the subject.

"A Review of the Past and Present Pathology and Treatment of Uterine Displacements," by Dr. Nowlin, of Shelbyville, was discussed by Drs. Crofford, W. G. Bogart, B. S. Wert, McSwain, Happel, and Moss.

"Immediate Amputations," by Dr. T. J. Happel, of Trenton, was well received and discussed by Drs. Thornton, Clay, Baxter, Cowan, Glenn, Crofford and Sheddan.

An Elaborate paper on "Croup," by Dr. G. W. Moody, of Shelbyville, was discussed by Drs. Thornton, Drake, Hope, Sebastin, Nowlin, Berlin, Murfree, Jr., Happel, Travis, Baxter and Sheddan.

A paper on "The Treatment of Corneal Ulcers," by Dr. T. Hilliard Wood, of Nashville, was read and discussed by Drs. Travis, Frank Trester Smith, G. C. Savage, and others.

"Report of a Case of "Neurotic Bladder Trouble and Subsequent Pyelo-nephritis, Relieved by Nephrotomy," by Dr. B. F. Dice, of Morristown, was highly complimented and fully discussed, as was also a paper on "Gastric Dyspepsia." by Dr. K. S. Howlett, of Bigbyville.

Dr. G. C. Savage, at the evening session of the Society, delivered the annual address, choosing as his subject, "Medical Progress, Its Helps and Its Hindrances." There was a capital attendance, and the doctor was listened to with marked attention. The address in full will be found in the Original Department of this number.

### Second Day's Session.

The second day's session of the Tennessee State Medical Society, if possible, was attended with an increased interest over that of the preceding day.

The proceedings of the day were opened by Dr. H. J. Warmuth, presenting a well prepared paper on, "The Radical Operation for Cancer of the Breast;" this was followed by a paper on "Cancer of the Breast," read by Dr. S. S. Crockett, and the discussion upon the papers was general, being led by Dr. G. M. Bazemore, of Cleveland.

Dr. W. F. Glenn next entertained the session with a highly interesting paper on "Hypertrophy of the Prostate." The discussion which this article elicited was one of the features of the day. Drs. Dice and Cooke were on the programme to conduct the discussion.

Dr. M. C. McGannon read a very interesting paper on "Alexander's Operation for Shortening the Round Ligaments," which was discussed by Drs. W. G. Bogart and J. S. Nowlin.

The afternoon session began by the presentation of the name of Dr. E. C. Anderson, of Chattanooga, for membership in the Society. Objection was made on the ground that he was a graduate from an Eclectic School of Medicine. It was urged, however, that he had been engaged in the practice of regular medicine since his graduation. After some discussion his application was laid on the table.

Three o'clock being the hour fixed for the election of officers, the chairman declared all other business out of order, the hour having arrived, and announced nominations for President the order of business.

Dr. Cowan, in a very complimentary manner, nominated Dr. G. W. Drake, of Chattanooga, for the position of President. From the applause which greeted the nomination, it was apparent that a unanimous vote would be given the candidate, and upon motion of Dr. Cooper Holtsclaw, nominations were closed, and the Secretary cast the vote of the Society for Dr. Drake.

Dr. J. F. B. Dice, of Morristown, was elected Vice-President for East Tennessee, and Dr. W. F. Clary, of Bellbuckle, for Middle Tenessee, without opposition, they being the only candidates from their respective divisions.

When, however, the Western division was called by the chairman, which was facetiously referred to as "the wild and wooly West across the river," a pretty sharp contest arose. Dr. Thornton, in a most complimentary speech, nominated Dr. T. R. Moss, of Dyersburg, and the name of Dr. J. A. Crook, of Jackson was presented by Dr. McSwain. Upon a ballot being taken Dr. Moss was elected, and Dr. Crook, in a very appropriate manner, moved to make his election unanimous, which was carried.

Dr. C. R. Atchison, of Nashville, who, by his careful methods of business. and courteous demeanor to all with whom he is associated, has become one of the most popular young members of the Society, was unanimously re-elected Secretary.

Another contest arose in the election of Treasurer, Drs. Miller and Nelson being the candidates. Although expressing himself as not being desirous of election and asking to be withdrawn, Dr. D. E. Nelson, of Chattanooga, was elected Treasurer for the coming term.

Following the election of officers a most interesting paper was read by Dr. Peavler, of Bristol, on the "Diseases of the Accessory Cavities of the Nose."

Dr. Frank Trester Smith, of Chattanooga, and Dr. G. H. Price, of Nashville, conducted the discussion of the paper, and with the introduction of a patient by Dr. Palmer, of Chattanooga, the well-known dentist, the topic proved very interesting, particularly so to the specialists present.

At the night session the Society was well entertained by a paper on "The Roentgen Rays, Their Prospective Utility, Etc.," by Dr. Drake.

Following this was a paper, "Fissura in Ano," by Dr. A. B. Cooke, of Nashville; "The Germ Theory of Diseases" by Dr. C. M. Sebastian, of Martin; "Sprained Ankle," by Dr. J. L. Crook, of Jackson, and "The Rational Treatment of Typhoid Fever," by Dr. J. A. Crook, of Jackson. All of these papers were exhaustive of their subjects, and elicited free discussion from the members of the Society.

### Third Day's Session.

In the absence of President Drake, the meeting was called to order by Vice-President Moss.

Dr. W. S. Scott, of Dickson, read the first paper on "Anomalies of

the Umbilical Cord." Dr. H. Warmuth, of Smyrna, followed, in the discussion of the paper.

Next came the subject of "Surgery of the Pancreas," in a paper presented by Dr. Paul F. Eve, of Nashville. Dr. Sheddan led in the discussion which followed, Drs. Briggs and Hill, who were to have done so, being absent.

"Professional Fads and Faddists," presented by Dr. W. K. Sheddan, of Williamsport, proved to be decidedly the most unique and interesting paper read before the Society. The specialist, the quack, the proprietary medicine prescriber, the college professor, the general practitioner, and even the patient himself, all were shown to become, sometime, the victim of the epidemic of fads. The author himself confessed to a weakness in that direction, from the very fact that he was continually exposing the innumerable fads with which he met, wherever he chanced to go.

The discussion provoked by this paper was very enthusiastically entered into by Drs. Neely, Savage, Price and Powell, all of whom had something interesting to say upon the subject.

Dr. D. Y. Winston, of Clarksville, came next on the programme, with a paper on the subject of "Treatment of Injuries of the Brain."

"Indications for Trephining," by Dr. Eugene A. Neely, of Memphis, followed. The cases reported by Dr. Neely were very interesting, and the attention given the reading of his paper was very complimentary to him.

Dr. T. R. Moss, of Dyersburg, opened the proceedings of the afternoon by reading a "Report of a Case of Gall-Stone." Dr. Bogart and others took part in the discussion, and the case reported by Dr. Moss proved to be of more than ordinary interest."

"Pernicious Malarial Fever," presented by Dr. C. W. Womack, of Chapel Hill, came next on the programme, and following this came a paper on "Sciatica," read by Dr. R. J. McFall, of Cumberland City.

"Mitral Regurgitation," by Dr. F. B. Reagor, of Flat Creek, and "Consumption Among the Colored People of the Southern States," by Dr. G. W. Hubbard, two very interesting productions, closed the afternoon session.

A most elaborate and enjoyable banquet tendered the Society by the physicians of Chattanooga at the Read House brought the meeting to a close. The menu was elaborate, Dr. Berlin, of Chattanooga, was master of ceremonies, and the toasts responded to by Drs. Drake, Savage, Happel, Witherspoon, Eve, Murfree, Hon. Geo. W. Ochs, Dr. Price, Mr. A. C. Ragsdale, Drs. Atchison, Vandeman, Cannon, Greve, Neely, Baxter and Abernathy, were highly enjoyed.

The meeting was in every way a most successful and satisfactory one, about two hundred members being in attendance, and quite a number of new members added to the roll.

The next annual meeting will be held in Nashville, commencing on the second Tuesday in May, 1897.

The president appointed the following committees:

*Committee of Arrangements.*—Drs. S. S. Crockett, Paul F. Eve, J. A. Witherspoon, A. M. Trawick, J. Y. Crawford.

*Committee on Publication.*—Drs. C. R. Atchison, D. E. Nelson, Deering J. Roberts, C. S. Briggs, Geo. S. Price.

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In prescribing the products of Manufacturing Pharmacists, we should be guided to a great extent by the business standing of the manufacturers. No other house in the South or West has a better reputation for strict integrity than the Robinson-Pettet Company, Louisville, Ky. We do not hesitate to recommend the preparations advertised by them on another page, of this issue.

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Vin Mariani.—Continued compliment is paid M. Mariani for the maintained high standard and excellence of his preparations, by the numerous honorable mentions and endorsements by members of the medical profession and those who had occasion to use his Coca preparations during the past thirty-five years.

Among the recent awards we note, Gold and Silver Medal from the Academie National de France; Gold Medal and a Grand Diploma of Honor from the Wine Exhibit of Bordeaux, France; Gold Medal and a Diploma of Honor at the Hygienic Exhibit at Amsterdam, Holland, and Mariani was awarded the Gold Medal and Diploma at Leamington, England, the jury surnaming "Vin Mariani" "Wine for Athletes."

Professional bicyclists and athletes, after careful trials of numerous tonic preparations, invariably give the preference to "Vin Mariani." Messrs. Dubois, Lucas, Vigneaux, Echalie, Andre Henry, Imans, Buffel, and many others, have attested to the vast superiority of "Vin Mariani" over all other tonics.

In the recent long distance bicycle races, in France, England and Bruxelles, the winners used "Vin Mariani," as reported in the daily press.

Bruxelles, Aug. 28, 1895.

"I, the undersigned, Andre Henry, winner of the bicycle race, August 26th, Paris to Dinant, without dismounting from the wheel during thirteen hours, declare having partaken of nothing but "Vin Mariani" to sustain my force.

"In addition will state that, after the race, I felt absolutely no fatigue nor any of the usually extreme lassitude such as I had after the Paris-Brussels and other races, when I had not used "Vin Mariani." For my coming Belgium races I certainly will use Mariani's marvelous tonic."

(Signed) "Andre Henry."

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The Alumni Association of the Medical Department of the University of Nashville, which was recently formed by a number of

the old alumni of the institution, held its first annual meeting on the evening of March 24, 1896.

The address was made by the first President of the society, Dr. John S. Cain, one of the oldest living alumni.

An annual dinner will take place at all subsequent meetings, at which an annual address will be delivered, and medical papers and subjects discussed.

Dr. M. G. Buckner, '96, was appointed to deliver the address at the next meeting, which occurs on the evening preceding the graduating exercises of the University.

All alumni in good standing are requested to join and take part in the exercises.

Communications should be addressed to Dr. JAMES C. PRYOR, Secretary, Nashville, Tenn.

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ILLINOIS CENTRAL HOSPITAL FOR THE INSANE.—I have repeatedly prescribed antikamnia for various neuroses with good effect. Recently prescribed it in a case of crampous enteritis, patient adult, highly nervous, and during continuance of paroxysms, and preceding it, is nervous and hypychondriacal, suffering intense pain. This case is one of long standing, and one where opium was objectionable, because of the tendency toward forming opium habit. However, opium has been used, but the effect of antikamnia has been more magical, more persistent, and followed by no digestive disturbance, as has been the case when opium was used.

My directions have been to use antikamnia whenever a paroxysm occurs. Have also found it invincible in protracted neuralgia.

Jacksonville, Ills., Sept. 19, 1891. FRANK P. NORBURY, M.D.

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PEACOCK'S CHIONIA has acted so nicely in my hands that I am constantly prescribing it in cases of hepatic torpor, biliousness, and all diseases caused by a deranged hepatic condition.

Mechanicsville, N. Y. ARTHUR W. JOHNSON, M.D.

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BURNETT'S COD LIVER OIL is a standard with the medical profession throughout the whole United States. Write to Theo. Metcalf Co., of Boston for literature.

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ELIXIR SALICYLIC COMP.—Wm. R. Warner & Co.'s Elixir Salicylic Comp. is at the present time, no doubt the foremost remedy for Rheumatism, Gout, Lumbago and kindred diseases. In acute inflammatory rheu-

matism, two tablespoonfuls every few hours, diminished to one tablespoonful every three hours produces desired effects.

It is a pleasant and permanent remedy, and is put up in 12 oz. square blue bottles by Wm. R. Warner & Co. It is advisable to purchase Elixir Salicylic Comp. (Wm. R. Warner & Co.) in original packages to avoid substitution of inferior imitations.

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SANMETTO IN RETENTION OF URINE.—Have given Sanmetto a good trial and find it one of the best preparations I have ever used. Case 1.—John D., age 70, Ireland, has been troubled for a long time, unable to pass his urine. After treatment with other remedies with no benefit, placed him on Sanmetto with following results: The first day the pus increased in quantity, on second day diminished, by fourth day could urinate himself—before this he had to be catheterized. Dose, one drachm every four hours for the first three days, afterwards one drachm three times a day. Discharged in ten days, a complete cure of cystitis.

Bayonne, N. J. A. C. FORMAN, M.D.,
House Physician, Bayonne Hospital.

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WRITE FOR ONE.—Some idea will be gained of the vastness of a great pharmaceutical laboratory when we inform our readers that the price list for 1896, which we have just received from Parke, Davis & Co., embraces some twenty-nine distinct and complete lines of preparations, comprising over six thousand articles. The business of this great house having increased almost by leaps and bounds, they have recently opened two new branches—one in New Orleans and another in Baltimore.

The list before us is a compendium of useful information, general, medical, pharmaceutical, and botanical; it is handsomely printed, and is conveniently arranged for reference. Every practitioner should write for one.

All who are familiar with the dignified, scientific methods of this firm, its uniform courtesy to seekers after information, the scrupulous purity of its preparations, and its magnificent laboratory in which unsurpassed discipline prevails, will not waste any wonder over a success which has become well nigh proverbial among physicians and pharmacists.

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AT A MEETING OF THE PHILADELPHIA COUNTY MEDICAL SOCIETY held April 15th, a Committee was appointed to urge the members of the American Medical Association to favor the holding of a semi-centennial celebration of its organization.

The Society also instructed its delegates to invite the Association to hold the meeting of 1897, which will be the semi-centennial, in the city of Philadelphia.

"MALTINE WITH COCA WINE" is a combination of Maltine, Claret, and an extract of carefully essayed Huanaco coca leaves, in which all the valuable principles of the leaves are retained. The diastasic strength of this attenuated Maltine preparation is greater than that of any unattenuated extract of malt on the market. In other words, forty per cent. of Maltine will convert more starch in less time than 100 per cent. of any other malt extract.

The combination of Maltine with Coca Wine supplies a tonic, a nutrient, and a digestant in a highly concentrated and palpable form. As a prominent physician epigramatically puts it: "The Coca boosts the patient and the Maltine furnishes the peg that prevents him from slipping back." Other tonics afford only temporary stimulation, with nothing to prevent subsequent reaction.

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A DOCTOR'S CARBUNCLE.—I thank you for the box of Sennine. It came just in time for me to try it on myself in a malignant carbuncle which had caused me much suffering.

It affords me pleasure to state that Sennine has benefitted me more in three or four days than any of the many antiseptics I have used, among which were iodoform, antifebrin, and aristol, so you can see that Sennine has the best standing with me, and I cheerfully commend it to my brother practitioners. Yours very truly,

R. M. WELLS, M.D.,

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# Reviews and Book Notices.

A MANUAL OF MEDICAL JURISPRUDENCE AND TOXICOLOGY. By HENRY C. CHAPMAN, M.D., Professor Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia; Member of the College of Physicians of Philadelphia, of the Academy of Natural Sciences of Philadelphia, of the American Philosophical Society, and of the Zoological Society of Philadelphia. Second Edition, Revised. With 55 Illustrations and 3 Plates in Colors. 8vo., cloth, $1,50. W. B. SAUNDERS, Publisher, 925 Walnut Street, Philadelphia. 1896.

The demand for many years by both the medical and legal professions for a medium-sized work on this most-important branch of medicine is fully met with in this excellent little work of Dr. Chapman. His experience as Coroner's Physician for

the city of Philadelphia for a period of six years gave him most admirable facilities for embodying in compact substance the most important facts and tenets to be embodied in such a work, which he has made both practical and instructive. For medical students and active practitioners who have not time to devote to more extensive treatises, this will prove peculiarily valuable. While the second edition combines all the excellence of its predecessor, the four years additional experience of the author has enabled him to make such additions as were needed, and it is brought fully up to meet the exigencies of the times.

MEDICAL JURISPRUDENCE, FORENSIC MEDICINE AND TOXICOLOGY. By R. A. WITTHAUS, A.M., M.D., Professor of Chemistry, Physics and Hygiene in the University of the City of New York, etc., etc., and TRACY C. BECKER, A.B., LL.B., Counsellor-at-Law, Professor of Criminal Law and Medical Jurisprudence in the University of Buffalo, with numerous and able Collaborators. Vol. III. 8vo., cloth, pp. 697. WM. WOOD & Co., Publishers, 43-47 East 10th Street, New York. 1896.

We had occasion some months since to call the attention of our readers to the two preceding and very handsome and excellent volumes of this great work; a work that will prove of great value and assistance not only to the medical profession but to our legal confreres as well. The third volume keeps up full well the excellence of its predecessors, and is an assurance that the fourth volume will not fall behind, making the entire work of inestimable value to American readers.

In Vol. III., we find Vision and Audition in their Medico-Legal Relations ably considered, by J. H. Woodward, M.D.; The Medico-Legal Aspect of Insurance, by D. Murray, Esq., and G. J. Edwards, Esq.; Insanity in its Relations to Medical Jurisprudence, by E. D. Fisher, M.D.; Mental Unsoundness in in its Legal Relations, by Tracy C. Becher, A.B., LL.B.; The Care and Custody of Incompetent Persons, by Hon. Goodwin Brown; a Table of Cases cited in the volume, and a full and comprehensive Index complete the volume.

The mechanical execution of the work, clear printing on excellent paper, strong and handsome binding leave nothing to be desired, and are in keeping with the excellence of its well-known publishers.

A TEXT-BOOK ON PATHOGENIC BACTERIA FOR STUDENTS OF MEDICINE AND PHYSICIANS. By JOSEPH MCFARLAND, M.D., Demonstrator of Pathological Histology and Lecturer on Bacteriology in the Medical Department University of Pennsylvania; Fellow of College of Physicians of Philadelphia; Pathologist to the Rush Hospital for Consumption and Allied Diseases; 8 vo. cloth, pp. 359, with 113 illustrations. Price, $2.50. W. B. SAUNDERS, 925 Walnut St, Philadelphia, Publisher. 1896.

This book will find its proper sphere of usefulness in the hands of medical students; yet, however, bacteriology and its wonderful developments belonging to the so recent past and the present, its pages will be found of great interst and profit to those practitioners of medicine who graduated before modern science had thrown its *Roentgen rays* on the etiology of disease, seeing through and beyond much that was unknown, or but dubiously taught by undeveloped and unproven theories.

The aim has been to describe only such bacteria as can be proven pathogenic by the lesions or toxines which they engender, and, while considering them, to mention as fully as is necessary, the species with which they may be confounded.

The author gives a clear and concise account of the technical procedures necessary in the study of bacteriology, a brief description of the life-history of the important pathogenic bacteria, and sufficient description of the pathological lesions accompanying the micro-organismal invasions to give an idea of the origin of symptoms and the causes of death.

The very handsome illustrations are mainly reproductions of the best the world afforded, and having been taken from the great standards are more reliable and superior to anything ever covering the same ground.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES. A Yearly Report of the Progress of the General Sanitary Sciences Throughout the World. Edited by CHARLES E. SAJOUS, M.D., and Seventy Associate Editors. Assisted by over Two Hundred Corresponding Editors, Collaborators and Correspondents. In Five Large Octavo Volumes. Illustrated with Chromo-Lithographs, Engravings and Maps. Philadelphia. THE F. A. DAVIS CO. 1895. Price, $15.00.

The seven preceding editions of this excellent work have established a fixed and permanent place for it in medical literature. It long ago passed through its period of probation successfully, and is now an almost indispensable part of the library of

the progressive practitioner. A complete collection of the *Annual* from the beginning to the present time forms a comfortable library of forty volumes, which contain concise summaries of all notable contributions to the progress of medicine during the respective years. Much of what is written in current medical literature has but an ephemeral existence. The task of threshing the wheat out of such a mass of grain is a colossal one; but it is ably performed by Sajous and his corps of assistants, who place before the busy every-day doctor the precious metal that has been extracted from a mountain of ore.

The general make-up is uniform with that of the previous issues, and the distribution of subject is arranged in the same convenient manner. The type is large, clear, and easily read. The references to publications are by number and date, thus saving much valuable space. The indexing of each volume is most thorough, being in triple column. Following this is a reference list in each volume, thus rendering the identification of publications referred to most easy. At the end of Vol. V. we have a general index to the five volumes, so that a subject, which might otherwise escape the reader, is easily found.

The handsome manner in which the *Annual* is issued, its comparative cheapness and its great utility should make every physician buy it. Its increasing popularity is attested to by the fact that each year witnesses an increase in the number of its sales. Not a small aid in this direction is the large number of well executed colored plates and engravings which are liberally distributed throughout each one of the volumes.

DONT'S FOR CONSUMPTIVES, OR THE SCIENTIFC MANAGEMENT OF PULMONARY TUBERCULOSIS. By CHAS. WILSON INGRAHAM, M.D., of Binghampton, N. Y. 8vo., cloth, pp. 218. THE CALL, Publishers. 1896.

The main objects of this work, as stated in the preface, are to outline to the physician and the pulmonary invalid a method of general management, which will give the most substantial and permanent benefit; to indicate how and when the consumptive should live, his method and manner of eating, sleeping, drinking and exercise; instructions as regards heredity and the prevention and avoidance of infection.

In so grave a disease, annually claiming so large a number

of victims, a clear concise statement of practical means and measures for its relief or prevention can but claim a careful consideration. The price of the work is not stated, but can be obtained from the author or publisher.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITIONER'S INDEX for 1896. Edited by a corps of thirty-seven department editors—European and American—specialists in their several departments. 8 vo. cloth. 728 octavo pages. Illustrated. Price, $2.75. E. B. TREAT, 5 Cooper Union, New York. 1896.

The fourteenth yearly issue of this valuable one-volume reference work is at hand; and it richly deserves and perpetuates the enviable reputation which its predecessors have made for selection of material, accuracy of statement, and great usefulness. The corps of department editors is representative in every respect. Numerous illustrations, many of which in colors, make the "Annual" more than ever welcome to the profession, as providing, at a reasonable outlay, the handiest and best yearly résumé of medical progress yet offered.

Part I., comprises the New Remedies, together with an extended Review of the Therapeutic Progress of the Year.

Part II., includes a number of recent articles by eminent authorities: How to determine the parasite of malaria; The Diagnosis of toothache and neuralgia; The Remedial value of Cycling; Sensory distribution of spinal nerve roots; Angio Neurosis; Life Insurance; and Roentgen's method of Shadow Photography, illustrated.

Part III., comprising the major portion of the book, is given to the consideration of New Treatmentt It covers 500 pages, and is a retrospect of the year's Medical and Surgical Progress.

The Fourth, and last part, is made up of miscellaneous articles, such as Recent Advances in Sanitary Science; New Inventions in Instruments and Appliances; Books of the Year, etc.

The arrangement of the work is alphabetical, and, with its complete Index, makes it a reference book of rare worth.

In short, the "Annual" is what it claims to be—a recapitulation of the year's progress in medicine, serving to keep the practitioner abreast of the times with reference to the medical literature of the world. Price remains the same, $2.75.

# THE SOUTHERN PRACTITIONER.

AN INDEPENDENT MONTHLY JOURNAL,

DEVOTED TO MEDICINE AND SURGERY.

SUBSCRIPTION PRICE, ONE DOLLAR PER YEAR.

*DEERING J. ROBERTS, M.D.,* - - *Editor and Proprietor.*

Vol. XVIII. NASHVILLE, JUNE, 1896. No. 6.


## Original Communications.

### REPORT OF TWO CASES OF HERNIA WITH REMARKS.


BY PAUL F. EVE., M.D., NASHVILLE, TENN.

Professor of Principles and Practice of Surgery, Abdominal, Orthopædic and Clinical Surgery, Medical Department University of Tennessee.


Thinking that the cases I am about to report may be of some interest to your readers, and prove in some instances beneficial, I have concluded to place them on record.

On January 4, 1896, I examined at the City Hospital Mr. McD., and found him suffering with a temporary irreducible femoral hernia. With the exception of this condition he was a robust man and looked the picture of health. The following history was obtained from him:

He was 61 years old, a farmer in an adjacent county, and had been engaged in this occupation all of his life. His health, on the whole, had been excellent; he had been, until the past

five years, a free drinker, but had at no time indulged in a spree. He served during the whole of the late war as a Confederate soldier, and bore the hardships without once being compelled to lay off for sickness. About five years ago, while lifting a heavy beam, he felt something suddenly give way, and discovered an enlargement in the femoral region. Pain was very severe and a physician was called in. Upon examination made by him, he pronounced it a hernia, and placing his patient under the influence of an anæsthetic was enabled to reduce it without much trouble. The hernia was retained in place by a compress and bandage, but a truss was not worn by him for four months later. He resumed duty two days after the reduction of the hernia and had no trouble until four months afterwards, when the hernia again returned during a heavy strain, but was easily replaced by the patient himself. Some friends at this time advised him to obtain a truss, which he did soon afterwards. The truss secured did not fit him very well, consequently he frequently went without it. He stated that during the five years after his first attack he repeatedly had the hernia descend into the femoral region, but was enabled to reduce it himself without much trouble, until four days before his entrance into the Hospital. He was seen by several physicians before he came to the Hospital, who, after trying to reduce the hernia, and finding, even under the influence of an anæsthetic, it could not be accomplished, advised him to go to the City Hospital for an operation. The patient positively stated to me and others that during the last five years he had drank but little liquor, occasionally taking a drink with a friend.

Soon after my examination, with the consent of the patient, assisted by Dr. Chas. Brower, Superintendent of the City Hospital, and the Hospital Staff, in the presence of the class, I operated upon him for the purpose of relieving the gut from its constriction, an incision being made in the usual manner. The constriction was found at the margin of Gimbernat's ligament, and the liberated gut having been pulled out and examined and found in good condition was returned to the abdominal cavity. Finding my patient's condition excellent under the anæsthetic, I determined upon a radical cure operation, prefering in this case Macewen's method, stretching the puckered sack to the femoral ring, and then by two or three sutures closing the femoral ring.

The patient was seen by me several hours after the operation, and he expressed himself as feeling perfectly comfortable and suffering no pain. There was scarcely any shock following the operation, his temperature and pulse being about normal. He was seen again by me the next morning, January 5th, and was feeling so well that he desired me to allow him to get up, which, of course, I refused. That evening about 5 o'clock he was taken with a rigor, which lasted him forty minutes, and to use the expression of one of the internes, shook the hospital ward; he became delirious and unconscious, it requiring four men to restrain him and keep him in bed. His pulse rate was 165°, respiration, 38°, and temperature, 99°, with widely dilated pupils and tremor all over his body, and great suffusion of face. I must confess, for a time, that I was staggered, as I was perfectly satisfied, from the very careful antiseptic and aseptic precautions that had been taken, as also from the temperature, it could not possibly be from septic peritonitis, and finally concluded, as it afterwards proved to be, I had to deal with a case of delirium tremens. Hypodermic injections of strychnin and nitro-glycerine were given together with valerianate of ammonium and whiskey, and after 24 hours my patient became much better, making from this time an uneventful recovery, and was dismissed from the hospital as cured on February 2, 1896.

The interesting features are: First, a case of femoral hernia, which is quite rare in the male; and, secondly, the development of delirium tremens after the operation, this being the first case that has ever occurred in my practice.

Case No. 2.—On January 26, 1896, I was called in consultation by Dr. Omohundro, of this city, and examined with him Mrs. W., for a growth near her right groin. The following history was secured:

She was 65 years old, the mother of seven children, the youngest being 18 years old. She had always been a healthy woman, and had attended to most of the duties of her household. About three years ago, while engaged in lifting a heavy tub of water, she suddenly felt something give way in her groin, giving her great pain, and attended by a severe vomiting spell. Upon, however, resuming the recumbent position and lying perfectly still, she felt something go back, and her pain and sickness en-

tirely disappeared. She thought but little of this and resumed her accustomed duties the next day. About one month later, while again lifting a heavy substance, she had a return of the same symptoms, which followed the same course when she resumed the recumbent position. After this last attack she consulted a physician, who, from the symptoms she gave, concluded she had had an attack of colitis, and prescribed for her and advised her to desist from heavy work. She followed this advice for about a year; but after this time, duties pressing upon her, she again resumed her active life. For the following two years she suffered time and again with this trouble, and thinking a change would do her good, she moved from the country, where she had lived from childhood, to the city. Six days before I saw her she had been suffering from constipation, and had been feeling quite badly. The evening before, while lifting a large jar, the old trouble again visited her and did not relieve itself as it did before. Dr. Omohundro was called in, examined the case, and told them he believed, from her symptoms, frequent vomiting, feeble pulse, pain in region of groin, etc., she was suffering from hernia. When I examined the patient her temperature was 102¾°, pulse, 140°, and respiration, 28°. The growth in the groin was hard and nodular; great pain, followed by vomiting, was produced after this examination. I concurred with the Doctor in his diagnosis, and advised an operation. Her consent being given, I operated on her two hours later. Upon coming down to this indurated mass I discovered it to be an enlarged gland, and in endeavoring to enucleate it I found attatched to its base a membrane surrounding the lower portion of the gland. Upon opening one portion of this membrane I found I had entered the sack of a direct inguinal hernia; the incision was enlarged and a nuckle of gut with omentum seen, the end of the om entum being firmly attached to the under surface of the gland. The constriction, which ex isted at the external abdominal ring was now divided, the liberated gut pulled out was found in a healthy condition, the adherent omentum ligated between two rows of sutures and cut off, and both the gut and omentum returned to the abdominal cavity. The pillars of the ring were now brought together and the operation rapidly completed. My patient made an uneventful recovery, has never

worn a truss since the operation, and when seen by me a short time ago was the picture of health. On examination of the gland the sack was found agglutinated to its lower surface, and seemed to form an integral part of its structure. The reason, I believe, my patient did not suffer from more repeated attacks of her hernia was due to the fact that the gland acted as an artificial truss, and did not allow the hernia to come down unless a great strain was brought to bear, thus pushing the gland forward.

## THE MODERN TREATMENT OF PNEUMONIA IN CHILDHOOD.*

BY JOHN M. BASS, M.D., NASHVILLE, TENN.

Associate Professor of Diseases of Children, University of the South; Physician to Relief Society Dispensary, Department of Pediatrics.

It will be well to state in the beginning of a paper upon a subject of as much importance as this one that while the text books upon general medicine, and even some upon Pediatrics, vary greatly in their methods of treatment of pneumonia occurring in children, I refer especially to Broncho-pneumonia, yet, by reference to the later papers of men who are handling daily in hospital, as well as private practice, large numbers of cases of this kind, and men who devote a large share of their time to the study of such cases, we will find that the general line of treatment is crystalizing into a definite shape. Not that we have not been reaching toward this end for some time, or that we have suddenly come upon an ideal treatment, for neither of these would be true, but by the slow processes of evolution, and by the elimination of many measures which were purely traditional, not to say unscientific, we have arrived at a point where we get better results than formerly, where we interfere less and add more to the comfort and welfare of the patient.

As an illustration I will cite the use of expectorants, so popular formerly, yet, at present, almost entirely discarded from the modern list. However we must not overlook this fact: That

* Read at the Middle Tennessee Medical Association, May, 1896.

the conditions under which the general practitioner is placed differ very greatly from those under which the medical men of our larger cities labor. With hospital wards where perfect attention to the minutest details can be given, where every change in the condition of the patient is noted by a trained nurse or resident physician, where perfect control over the patient may be had without interference of any kind, it is not hard to see why these men get better statistics. It is these surroundings which enable them to formulate in a systematic way a treatment founded upon facts, and the nearer we can bring our patients to this standard the nearer we can approach their statistics.

There is one other thing which is always a source of trouble to the young physician. In many cases he is obliged to put medicine into the child's stomach to act upon the minds of its parents. Aqua Destillata will usually answer all needs, and will not derange the child's stomach, a point of great importance.

### Atmospheric Conditions.

Maintain as nearly as possible a free supply of fresh air in the apartment at a temperature of from 70° to 75° F. It is well to keep this moist by having a steaming kettle in the room, and a smaller vessel containing either pine needle oil or creasote over the kettle. In many cases the cough can be entirely controlled by this alone. From twelve to fifteen hundred cubic feet of air should be allowed to the patient, and Dr. Holt, at the Baby's Hospital (*Archives of Ped. Vol. xiii. No. 4, p.* 246.), goes so far as to have the patient removed from the room at least once daily to permit a more thorough airing.

### Diet.

The feeding of these cases is of great importance, milk, of course, being our chief reliance. In very young infants partially peptomized milk has been strongly advocated. The food should be well diluted and given regularly. The animal broths and other liquid foods may be used with advantage with older children. Cod-liver oil may also be mentioned, but the greatest care should be taken to keep the alimentary tract in the most perfect condition, as serious consequences often follow a slight derangement.

### Counter Irritation.

Counter irritation is widely used, chiefly in the form of either

mustard paste or turpentine stupes. These should be continued only long enough to produce rubefaction, but may be repeated frequently. It will be found most useful in cases where there is much bronchitis and pain, although we have good authority for using it as a routine practice.

### Baths.

Cool baths and sponging will be found most useful in controlling high temperatures. As to the temperature of the bath, and the time to give it, ordinarily with a temperature not exceeding 104° F., a bath of from 75° to 80° will answer all requirements. When the symptoms become distressing, a hot bath with a few spoonsful of mustard flour added will relieve the patient greatly. Spongings with cold water where the temperature runs above 104° F. will reduce it rapidly. Cold tub baths can be used in high temperatures, but I doubt their advisability.

### Protectives.

The use of some protective to the chest is still in vogue, although there are several advocates for its disuse. Whether it be a cotton wool or an oil-silk jacket seems to matter little. I must say that I have derived no appreciable benefit from either. Poultices scarcely find any place in the modern treatment. Hot water bags to the feet will be found useful.

### Internal Medication.

This is, of course, symptomatic, and as a general rule little medicine, with the exception of stimulants, will be required. Whisky or brandy well diluted may be begun early. This has been my practice, although many prefer to wait until it is demanded. Digitalis and strychnine are usually not necessary until the later stages, and frequently not at all. The coal tar derivatives, with the exception of phenacetine, are now rarely used. The latter is sometimes serviceable to control restlessness. Expectorants and cough mixtures invariably upset the stomach, do more harm than good, and are rapidly falling into disuse. Opium is only used where absolutely demanded. Not that it is regarded as particularly dangerous, but by using it you defeat one of the chief aims in view, that of preserving the alimentary canal in as perfect a state of usefulness as possible for purposes of nutrition. This will also apply to the expectorant mixtures.

Laxatives will be required in some cases. Calomel in small doses will answer all ordinary purposes. Water should be allowed freely in all cases. It is much better to watch closely the diet of the infant than to have to treat a constipation, brought on by a bad diet. There are other agents used in the treatment of pneumonia, only one, however, will I mention. Oxygen, which occasionally has given such brilliant results in pneumonia in adults, has been tried and seems to have proven itself useless in children.

In concluding I will state briefly what I have stated above at length, that the modern treatment consists chiefly of great care to the details of ventilation, of feeding, and counter irritation; in resorting to baths, spongings, the hot water bottle and ice cap to govern temperature and pain, rather than antipyretics and anodynes, and to the avoidance of medicines which interfere in any degree with alimentation, and a resort to careful stimulation, and the intelligent use of as few drugs as possible.

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## TREATMENT OF ULCERS OF THE CORNEA.*

BY T. HILLIARD WOOD, M.D.,

Professor of Diseases of the Eye, Ear, Throat and Nose, Medical Department University of Tennessee.

As ulcers of the cornea are often met with, both in general and ophthalmic practice, I beg to present to this Association some observations on their treatment.

The principal measures for the arrest of corneal ulceration are as follows:

1. The removal of foreign bodies.
2. To arrest any conjunctional inflammation.
3. To check the spread of the ulcer by scraping, the actual cautery, and by antiseptics.
4. By incision, to evacuate the aqueous humor and reduce intra-ocular tension; also, to afford an escape for pus confined in the anterior chamber or between the corneal layers.

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*Read at the Sixty-third Annual Session of the Tennessee State Medical Society, Chattanooga, April 14, 1896.

5. By a bandage to afford protection, support and rest to the thin, ulcerated cornea.

6. To relieve pain, congestion and lachrymation by atropine.

7. To hasten the absorption of pus and other inflammatory effusions by moist heat.

8. To stimulate the surface of chronic or indolent ulcers by irritants.

9. Counter-irritation, by seton or blister.

10. Treatment of causative or complicating constitutional conditions.

In the first indication, "the removal of foreign bodies," are included the removal of bodies imbedded in the cornea, of cilia, which are directed backward and scratch the cornea, and of papillomata of the edge of the lid when causing friction to the cornea.

The second indication, "to arrest any conjunctival inflammation," is often more important than the treatment of the ulcer itself. The various kinds of conjunctivitis, especially the purulent type, are among the frequent causes of severe corneal ulceration. Indeed, corneal complication constitutes the one great danger in all forms of conjunctivitis. In corneal ulcers, caused and accompanied by purulent ophthalmia, the relief of the ophthalmia, by cleanliness, hot or cold applications, and nitrate of silver, constitutes the best treatment of the ulcers.

The third indication, "to check the spread of the ulcer by scraping, the actual cautery, and by antiseptics," is based upon the rules of antiseptic surgery. These ulcers are often caused by infection, and, when not originally caused by it, become infected as soon as they occur. These germs may be specific, as in ulcers, accompanying acute blennorrhoea, or the ordinary pus cocci (staphylococcus). The progressive destruction of corneal tissue in ulceration is often caused by micro-organisms. To render the ulcer aseptic is, therefore, of prime importance. This is done under cocaine anaesthesia by curetting the ulcer, applying the actual cautery, and the use of iodoform, either in powder or in a salve.

An excellent and convenient substitute for the actual cautery is pure carbolic acid. This was first suggested by the late Dr. E. Williams, of Cincinnati, and has often been used by myself with the happiest results. The application of the actual cautery, or even of pure carbolic acid, to a cornea, thinned by ulceration, may seem severe, but the wisdom and success of the measure are often shown by the

immediate subsidence of the pain and irritation, and by the healing of the ulcer. There are many progressive ulcers which will yield to nothing else, but which are rapidly cured by scraping, cauterization and iodoform salve. To those who have not personally tried those measures, I beg to insist upon their superior virtues.

The fourth indication, "by incision to evacuate the aqueous humor and reduce intra-ocular tension; also to afford an escape for pus confined in the anterior chamber or between the corneal layers," is to follow the suggestion we gain from nature. It has often been noticed when ulcers progressed to perforation that they immediately began to heal and got well. Upon this observation is based the practice of perforating the cornea at any point in its field, or, as is often done, directly through the base of the ulcer. This paracentesis, by allowing the aqueous humor to escape, relieves pain, reduces tension, favors osmosis in the corneal layers and promotes healing.

The fifth indication, "by a bandage to afford protection, support and rest to the thin, ulcerated cornea," is of much value. By the bandage the lids are made to splint the weakened cornea and prevent staphylomas; the constant friction of the ulcer from the batting of the lids is stopped, and pain relieved, and any antiseptic salve put in the eye is kept for a much longer time on the ulcer.

But the bandage cannot be used in infants, nor should it be employed where there is much pus formation, as in acute blennorrhoea, because it defeats drainage. Again, there are cases which do not seem to tolerate the bandage, and where the symptoms are all aggravated by it. In such cases the bandage should be discontinued.

The sixth indication, "to relieve pain, lachrymation and congestion," is met by a solution of atropine. Atropine does not seem to affect either for better or for worse the ulcer itself, but it does greatly relieve the irritation, and contributes to the patient's comfort. Moreover, in all severe ulceration of the cornea there is danger of iritis, and to prevent or cure this atropine should be used.

Eserine is by some used in corneal ulceration, especially with ulcers near the corneal margin. But, while it may reduce intra-ocular tension, and so favor the healing of the ulcer; yet the danger of iritis from its use seems to me to contra-indicate its general employment.

The seventh indication, "to hasten the absorption of pus and other inflammatory effusions by moist heat," is best met

by the interrupted use of cloths wrung out of hot water and applied to the eye. This moist heat acts favorably in many ways. It greatly relieves pain and photophobia, and is very grateful to the patient; it hastens the absorption of pus, whether in the anterior chambers or between the corneal layers, and is a valuable stimulant in many of the chronic ulcers occurring in old age.

The eighth indication, "to stimulate the surface of chronic or indolent ulcers by the use of irritants," is met by the use of Pagenstecher's ointment, composed of 2 grains of yellow oxid. mercury to 1 drachm of vaseline. Another good stimulant is diluted tinct. opium, dropped in the eye twice daily. But those stimulants are irritants, and should not be used in the acute stage of sthenic ulcers.

With the ninth indication, "counter-irritation by setons or blisters," I have only a limited acquaintance, as they have seldom been necessary in my experience. I have occasionally had good results in chronic cases from small, repeated blisters on the temple, but have never used the seton. If all other measures are faithfully carried out, I believe that such a disagreeable remedy as a seton in the nape of the neck will seldom be necessary.

The tenth indication, "the treatment of causative or complicating constitutional conditions," is last but not least. The cornea, being removed from direct blood supply, receives its nourishment by absorption. Hence, in depraved constitutional conditions, it is one of the tissues most likely to suffer. For this reason, we have ulcers accompanying diathetic and asthenic conditions, as, for example, in struma and in Asiatic cholera. The general treatment should meet the special constitutional requirements, and will include alteratives, tonics, nourishing food and out-of-door exercise.

Of the foregoing measures, it is not supposed that all of them will be used in every or any case. The physician must from them select the ones best suited to any special case. But, of these measures, I firmly believe that scraping the ulcer, cauterizing it with actual cautery or pure carbolic acid, and dressing it with iodoform salve, and applying a bandage, will relieve more cases than any other one remedy proposed.

DISCUSSION.

Dr. B. F. Travis, Chattanooga. First, I use the atropia, and curette the ulcer and apply the cautery. I place the curette among the first and most important measures. I use the nitrate of silver, and have had good results. I think hot water does great good. I

never use the bandage, unless there is danger of rupture of the cornea, but I use the hot water very freely. The ointment of mercury, the essayist referred to, is stronger than the one I use. I hardly ever use over a grain to the dram, and in children I use half a grain to the dram. This has been better in my hands than the use of the stronger ointment. I have never used the iodoform much. I apply the silver by placing a very minute piece of cotton on a very small probe, saturating the cotton with the nitrate of silver, and then squeezing out as much as possible, and apply after curetting.

Dr. Frank Trester Smith, Chattanooga. In regard to the use of the yellow oxide ointment, I am like Dr. Travis, I do not use it so strong as does the author of the paper. Sometimes I find, even where the ointment is made weaker, that it irritates more than I want it to. I believe one cause of this is the fact the yellow oxide is not thoroughly triturated. A good way to accomplish the trituration is to have it mixed first with a little bland oil, as sweet oil, before it is mixed with the vaseline. Another method that has given good results in my hands, has been the use of the solution of bichloride of mercury, sometimes as weak as 1-20,000, to 1-10,000. The ulcer is washed with this and then dusted with boracic acid. The use of atropin is the rule in corneal ulcerations, but when we get an ulcer that does not yield to atropin and heat and the other things that have been mentioned, we sometimes find when we change to eserine the conditions will become better.

I would like to hear from the President on this paper.

Dr. G. C. Savage, Nashville. Mr. Chairman and Gentlemen: There are just two or three points in connection with this paper I want to emphasize. One is the application of heat and the method of applying it. I use either the poultice made of flaxseed meal, or the Japanese hot-box. The Japanese hot-box may not be familiar to you all, but it is one of the best means for the application of dry heat; the poultice is the best for the application of moist heat. The poultice in diseases of the cornea, and in deeper diseases of the eye, is capable of doing only good if properly applied. The only contra-indication for the poultice is the presence of a muco-purulent discharge from the conjunctiva. A poultice which would retain the pus would do harm.

The method of making and applying the poultice I conceive to be of prime importance. A plate should be first heated, and then the meal poured into the plate and stirred, with hot water, until it is thick enough to stick if you were to throw it against the wall. Then throw the ends of the cloth over it, when it is placed in the middle of the cloth, and apply to the eye, and bind it over the eye, and allow to remain an hour and a half or two hours, covered with oiled silk. Then let the patient go as long without the application

of another poultice, as he wore the poultice just removed. The indication for the application of the poultice is the return of pain. I do not believe dry heat has one particle of advantage over moist heat, but I believe moist heat has rather an advantage over the dry heat. But if I am not permitted to use the moist heat, I use dry heat in the shape of the Japanese hot-box.

In the treatment of corneal ulcerations, I do not believe we have anything better than the discs of iodoform. I heard a paper read on this subject, and we all felt rather incredulous when the author said he could treat such cases and cure them in a few days. None of us were ready to believe him! at least, if he had not told us the truth before, we would not have known he was telling us the truth then. Of course, I would use the salve or powder in preference to the disc in cases of muco-purulent discharge. The discs should be large enough to cover the part of the coronea affected. They, at first, cause considerable irritation. The proper method to keep the discs soft is the use of glycerin when making them. Muhl's method was to cleanse the eye with a solution, preferably bichloride of mercury 1-10,000, and then apply the disc, and use over this a compress bandage. It is then left alone for three days, when it is usually found healed. I had more curiosity than would allow me to go three days without looking at the eye. After returning from Edinburg I tried the discs, but even with my modified method of using the disc I was well pleased. I have not been willing to let the patient go three days, although I think it would be better were I to do so.

Now I want to speak of a new remedy, that is the use of the permanganate of potassium in about two per cent. solution. I believe this remedy is capable of doing great good, especially in ulcers attendant upon conjunctival troubles.

I might say other things upon this subject, but my time is about up.

Dr. T. H. Wood, Nashville. I am very grateful, gentlemen, for the discussion this short paper has brought out. I used to have considerable trouble in treating corneal ulcers; but recently I have gotten along with them more satisfactorily. I believe a great many of the profession have the idea that an ulcer of the cornea is different from an ulceration anywhere else, that there is something in the essence of it that makes it different from an ulcer on the shin or any part of the body. The sooner one gets rid of that idea, the sooner will he treat successfully ulcers of the cornea. I believe we will be successful when we remember the ulcer of the cornea is essentially just like an ulcer on the shin or any other part of the body. An ulcer is to be treated practically about the same way in one locality as in another, and the fact it is on the cornea does not necessitate some line of treatment totally different from the treat-

ment which would be necessary if it were located on any other part of the body. I believe curetting, cauterization and the use of iodoform is the best treatment, for the most of them at any rate. The cautery used may be the actual cautery, the carbolic acid, nitrate of silver, or the permanganate of potassium. All these remedies are practically the same in effect; they are all antiseptics and they do good for that reason. Anything that will destroy the germs, I have no doubt, will accomplish the same end. Just as soon as we treat corneal ulcers, as we would ulcers on the shin, just so soon will we cure them.

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## EUCAINE—A NEW LOCAL ANÆSTHETIC.

BY H. KIESEL, DENTIST, BERLIN.

(*Translated from the "Zahnärztliche Rundschau," Berlin, April* 5, 1896.)

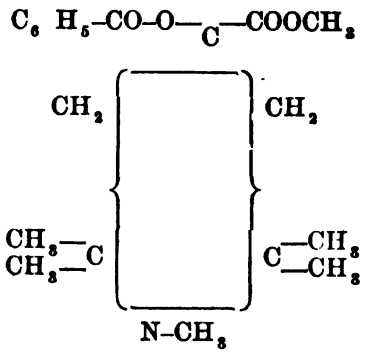
When one talks or writes of a new local anæsthetic nowadays, it is met with a dubious shake of the head, and either its failure or the report of toxic by-effects that rob it of all its value is awaited. For the list of such remedies is by no means a small one; yet there is none that is always applicable or successful.

Once it was thought that cocain e deserved its place at the head of the list of the local anæsthetics, and it received an enthusiastic welcome. But soon its too frequently severe toxic effects were learned; it was seen that its solutions readily decomposed, and, above all, its non-reliability was recognized, since in some cases even large doses were found to have little or no effect, and in other instances the injection of small amounts would be followed by excessive reaction. The author has himself had the experience of an injection of 0.05 grams of cocaine ($\frac{3}{4}$ grain) causing so violent a reaction that the patient remained in an apparently lifeless condition for an hour and a half. The pulse and the respiration seemed to stop; amyl nitrite was useless, and the patient's life was saved only by the vigorous use of artificial respiration. Palpitation, feelings of apprehension, tiredness,

apathy, lasting for hours, and even vomiting are not unusual effects of cocaine injections.

In consequence of all this cocaine was soon almost banished as a means of local anæsthesia from our armamentarium. A substitute for it, on which I am about to report here, will indeed be welcome; I refer to the recently introduced remedy known as Eucaine.

Like cocaine, Eucaine is the methylester of a benzoylated oxypiperidincarbonic acid. Its constitution is represented by the formula:



The hydrochlorate of Eucaine, which is to replace the hydrochlorate of cocaine, has the following chemical constitution: $C_{19}$, $H_{27}$ $NO_4$ $HC_1$.

From a chemical point of view Eucaine has an advantage over cocaine in that it is not decomposed by boiling with water; cocaine under similar circumstances dividing into benzoylecgonine and methyl alcohol, and losing its efficacy as a local anæsthetic.

Eucaine, like cocaine, is used in the form of an injection. At first I employed a solution of 1:15 of sterilized water, using, according to the nature of the operation and the size of the field to be covered, from one to two syringefuls. But I soon found that higher percentages might be employed. I then prepared a solution of 1:6½, and used that thenceforth in my experiments. Their results were entirely satisfactory.

As regards the advantages of Eucaine over cocaine, I note as follows:

1. The heart is in no way influenced by it. In fact I noticed that in very nervous patients, whose pulse had risen to 120 and

130 before the operation, the heart beats became normal and regular very soon after the injection.

2. The anæsthesia is more extensive in area and lasts longer than does that of cocaine. In some of my experiments the analgesia extended even to the muscles. In one case, where an injection was given over the first incisor, there occurred a paralysis of the ala nasi and anæsthesia of the nasal mucous membrane on the right side. The patient declared that her nose felt as if it was stopped up, but the sense of smell was not interfered with.

3. As much as 2 grams (30 grains) of Eucaine can be injected without trouble; whilst of cocaine the similarly safe dose is only 0.01 gram ($\frac{1}{6}$ grain). Thus of a solution of 1:6½, about 15 per cent,, 12 syringefuls would constitute a maximum dose. Half that quantity would, however, under favorable circumstances be sufficient to painlessly extract all the teeth from a mouth.

4. Solutions of 1:6½ in sterilized water are permanent at the ordinary temperature of the room. They remain clear without the addition of carbolic or salicylic acids and do not become flocculent as cocaine does.

5. Finally I am informed that it is intended to put Eucaine on the market at a price considerably less than that of cocaine.

When we consider the facility of application of Eucaine, the certainty of its action, and, above all, its great advantage in the absence of noxious by-effects, it is evident that it will soon become one of our most favored anæsthetic remedies.

I have known the preparation since November, 1895, and have used it exclusively. My results have been such that I have cast aside both ethyl chloride and ethyl bromide entirely.

Who among us has not experienced the excitation and vomiting that so frequently occur in operations done under the bromide of ethyl narcosis? Who among us has not seen ethyl chloride cause excessive secretion of saliva, when extractions of the second and third molars were undertaken? Who has not met cases in which the stream of chloride of ethyl was hindered by the soft parts from reaching the second, not to speak of the third molar? All these unpleasant things may be avoided by the use of Eucaine, without in any way interfering with the results that are aimed at.

I use a Pravaz hypodermic syringe and inject the solution about 1 centimeter in front of the tooth to be extracted. In this

way it is rarely difficult to do a painless extraction even of the third molar. In one case, in which on account of anchylosis the syringe could not be advanced far enough—the third lower molar of the left side was to be extracted—I injected from without, in the direction of the diseased tooth. Four or five minutes after the injection the anæsthesia was so great that the extraction could be effected without pain. If, as sometimes does happen, the effect of the drug is not at once apparent, or is not sufficiently marked, it suffices to give a half, or in rare cases a full syringeful additional, and both patient and operator will be satisfied with the result. In none of my cases did any of my patients show any disturbance of the system at large.

In a few cases there were swellings of the cheek after the injection, though the solution and the disinfection of the syringe could not be criticised. Thereafter I cleaned the mucosa thoroughly with cotton soaked in carbolic solution before making the puncture, and I have seen no more of them.

I shall now mention two cases in which I used Eucaine which are characteristic, and will enable us to judge of its great applicability in dental practice.

The first was the first one in which I used the drug. It was the extraction of the root of the left upper canine, in consequence of a bet, the condition of which was that the extraction should be done without narcosis. With Eucaine it was done painlessly and satisfactorily.

The second case was that of a theological student, who had undergone chloroform narcosis fifteen times in half a year for surgical reasons. I knew that the patient had been operated on under chloroform, but that the narcoses had been so many was purposely concealed from me. The patient had a severe toothache, the cause of which he thought was the second superior molar of the left side, though the second inferior molar of the same side was also painful. The patient could not be convinced of his error, and demanded extraction of the latter under narcosis. To this I finally consented, as the second left inferior molar was already lost. The patient was extremely timid, and believed that only very large quantities of ethyl bromide could procure him absolute painlessness. He consequently resisted the ethyl bromide action to the utmost. Narcosis occurred only after the adminis-

tration of 25 grams (⅝ ounce) of ethyl bromide. I then attempted to extract the tooth; but the patient awoke too early, and the tooth was fractured. In the evening the patient came back with violent pain and demanded that I extract the root. His condition was such that I could not think of another ethyl bromide narcotization. But a syringeful and a half of Eucaine sufficed. The next day the patient had become convinced that my opinion was right, and demanded the extraction of the second left superior molar. Again he was given an injection of one and a half syringefuls, and again there was the same good effect. The patient assured me that he had felt nothing at all. These good results in extraction, together with similar ones in other operative procedures, induced me to substitute Eucaine for the cocaine in my arsenical paste. Here also its action was an excellent one. But seldom were there complaints of slight pain after the introduction of arsenic with Eucaine.

Such are my experiences; and they give me the right to ask my colleagues to replace cocaine with Eucaine in all cases so as to control my experiments and to extend the usefulness of the drug.

Eucaine is a valuable enrichment of our armamentarium; and will be at least a very dangerous rival to cocaine, as soon as it is better known.

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# Selections.

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YEAST NUCLEIN IN THE TREATMENT OF HIP-JOINT DISEASE.—In the *American Lancet* for January, 1895, Dr. Charles W. Hitchcock, of Detroit, remarks that not all cases of hip disease are, with any fair promise of success, amenable to conservative treatment. Cases long neglected, in which erosion of the joint structures has already occurred, together with suppuration and resulting fistulæ, are not encouraging instances for non-operative measures. An early diagnosis is of the utmost importance, that the case may be taken in hand before gross and irreparable

damage has placed it beyond the reach of any save the most heroic treatment.

The nucleins, says Dr. Hitchcock, are among the newer remedies that may do much as an aid to tissue-building, more especially as they are said to influence cell metabolism so as to bring about a healthy resistance to disease processes.

The germicidal properties of nuclein, he continues, have been demonstrated, and Vaughan and McClintock have shown that the germicidal constituent of blood-serum is a nuclein. Parke, Davis & Co., he says, have rendered yeast nuclein accessible to the profession. They make it for Dr. Vaughan and according to his formula; the solution which they supply is about a one-per-cent. solution. Of this solution of yeast nuclein, from five to sixty minims may be administered at a time. The dose may be increased gradually and cautiously from the initial dose (which may appropriately be about ten minims), regard being had to the febrile reactions, which may be decidedly marked, and are to be looked out for.

He then gives the following report of a case: "March 30, 1894, I first saw Miss L. C., aged twenty years, of English parentage, and in this country only about two years. She is one of a family of six children. One sister died at ten months, and one sister, aged nineteen years, has of late had what is reported by letters from her home as 'dropsy of the knees.' The father and mother are both living and are healthy, so far as I can learn. One maternal aunt died of consumption. The patient herself is of medium size, rather rosy complexion, and somewhat delicate in appearance. The young lady gives a history of having been always well until December, 1890, when she fell on a sidewalk and struck on the left hip. The following month she fell on the ice on the same hip, which, she says, 'has seemed weak' ever since this second fall, though she was able to be about as usual, and tried to persuade herself that she had no serious trouble. She went to the World's Fair in the fall of 1893, and each day's sight-seeing tired her greatly. Her left knee would pain her at night and the hip would ache; but she would not give up to it. Later, after her return home, her hip began to pain her intensely after every walk. The first pain was in the knee, and more or less still continued there, but the hip now grew so exquisitely

sensitive and painful that all use of the leg had to be given up, and for three weeks before I saw her (March 30th) she had not walked at all. She was obliged to lie on the back or right side, and I found the left leg well flexed and adducted. Any attempted passive movement of the leg seemed to give great pain, and the whole region about the hip joint was so sensitive that even the lightest pressure of the finger could scarcely be borne, though at the same time the sensitive area presented nothing on inspection to attract notice. Any attempt, with the patient on her back, to extend the leg, quickly caused an arching of the pelvis to correspond to what little extension could be endured.

"Removal to the Harper Hospital was proposed and consented to. She endured the ride of two miles in the ambulance very well, and was admitted between 5 and 6 P.M., March 30th, with a temperature of 99.6° F. and a pulse of 80. Lead-and-opium stupes were applied to the region of the sensitive joint, and under their use the acute tenderness so subsided that on April 3d, by careful manipulation, we applied a simple Buck's extension, the plaster being applied the whole length of the thigh and leg. This was kept up for several weeks and with quite a heavy weight, greatly to the relief of the patient, pain gradually disappearing from the direct region of the joint, being longest complained of through the groin.

"June 1st I applied a plaster-of-paris cast enveloping the entire left leg from the ankle up, and extending around the pelvis. An extra sole of about an inch and a half in thickness was now applied to the sole of the right foot, crutches were secured, and the patient was encouraged to be up and about. She soon began to walk some each day, but the weight of the cast annoyed her, and its pressure about the pelvis irritated her (though it really fitted very well), and she found a semi-reclining position in a wheel-chair much more comfortable than the erect position. The cast had been relied on to make necessary extension, but now became somewhat loose and was removed on June 27th. Two days later a Buck's extension was again applied. The patient had not borne the confinement to bed and hospital well; she did not eat or sleep well, and was getting thin, although the hip was now very comfortable. She therefore decided to leave the hospital, which she did on July 6th.

"On July 4th, under chloroform, I injected from two to four drachms of a ten-per-cent. iodoform emulsion into the joint cavity. I took this opportunity to completely flex the leg on the thigh and the thigh on the body. There was no adhesion or resistance in either joint, and no feeling as of erosion or thickening about the hip joint. During her stay in the hospital the temperature varied from normal to 100°, but the most of the time between normal and 99.2°. The pulse varied from 76 to 110. Malt, hypophosphites, cod-liver oil, and other remedies had been given, but had not been well borne.

"At home she was for a short time kept in bed, with extension, but soon she tired of this and insisted on being up and about on her crutches. She improved somewhat in appetite and felt much better, but still slept poorly. She had no pain in the hip, and took several long walks and rides in the street-cars. She presumed too much upon her ability to do, however, so that restrictions were necessary. Extension hardly seemed called for, but I had a Thomas splint made for her—to thoroughly immobilize the joint. This she continually wore during the day, and with no discomfort save the awkwardness in sitting.

"September 1st I began the systematic use of yeast nuclein, and the improvement almost from the first has been noticeable and extremely gratifying. The remedy has been administered hypodermically, and the site chosen was the region immediately around the affected hip joint. The first few injections were made daily, but the reaction seemed to me so marked that I found treatment on alternate days to be more satisfactory. It has been recommended, as a good precaution, to sponge the chosen site with a two or three-per-cent. solution of carbolic acid, for its antiseptic and local anesthetic effect. This precaution, however, I did not find necessary, but used great care with needle and syringe, sterilizing both, each time, before using.

"From September, 1894, to January, 1895, the case was under constant supervision and care, and correct and detailed reports were kept noting the patient's temperature, general condition, and especially the amount of nuclein solution which was injected at each visit. At the beginning twelve minims only were used in each twenty-four hours, this being gradually increased to fifty minims with the happiest results. There were at times some

pain and a burning sensation at the site of the injection. The temperature each afternoon was about 99° to 99.4°, on one or two occasions going as high as 101.2°. At the time of the last-named date the patient experienced no pain whatever in the hip, and expressed herself as feeling as well as ever. The nuclein was temporarily stopped, and I do not consider it accomplished all a continuance of it might do. The improvement has been most gratifying since I began giving the nuclein, and I think there can be no doubt that her comfort has been due, in a large degree, to this remedy. It was given with the idea that her case was probably tuberculous, and for this suspicion the family history affords us more or less ground. The nucleins are said to be of avail in incipient tuberculosis, and this seemed a good case for their use, which is, of course, as yet largely empirical. The disease process in this case certainly seems to have been held in abeyance. Whether the action of the nuclein in such a case is simply to enable the cellular elements to resist encroachments of bacilli, or whether we may hope for so strong a germicidal action as to destroy entirely the bacilli, is, I judge, a question concerning which one can, as yet, only speculate. This patient understands that she is forbidden to step on her left foot or use the limb before next summer, and the day may then be still further postponed. I do not yet regard, or now report, the case as one of recovery, but it seems to me especially interesting as showing gratifying improvement under the use of an agent, quite new as yet, which may have a wide field of use. I hope eventually to have the young lady walking without apparatus of any sort, and an evidence of what conservative treatment may accomplish, even in a somewhat unfavorable case."

In a postscript written in January, 1896, Dr. Hitchcock adds:

"This patient was kept under frequent observation until May, 1895, the splint having been discarded some time earlier. In May, first one crutch, then both, and later the cane were dispensed with, the injections of nuclein were discontinued, and the patient has since walked through the summer and fall without support of any kind, and without any discomfort whatever in the hip. She has been very happy and grateful for her relief from pain, and it has been delightful to see her evident joy in her ability to walk without suffering. Indeed, she has been altogether

a pleasing fulfillment of what I hoped to do when I first reported the case in January, 1895, and this excellent result I attribute very largely, if not entirely, to the long and persistent use of nuclein."—*New York Med. Jour., March* 7, 1896.

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Division of the Vas Deferens in Prostatic Hypertrophy.—Dr. Reginald Harrison recently delivered an address on this subject, from which we gather the following: In 1893 Dr. W. White, of Philadelphia, suggested that castration might be tried as a remedy for troubles connected with certain forms of prostatic hypertrophy, with the result that this practice has now been adopted in numerous instances with some amount of success. It is interesting to notice, now that attention has been called to the possibility of its practical application, how often the fact has been stated in surgical literature that interference with portions of the gentito-urinary tract is followed by atrophy of the prostate. If we turn to records of injuries to the vas deferens it will be found that Birkett, Hilton, and others have shown that atrophy of the testis is a sequence in the human male of rupture or section of this duct. If this is so, why should we not take advantage of it, and in this way induce prostatic atrophy without resorting to castration? It is probable that in a certain number of prostatic cases the amount of shrinkage of the gland necessary to make all the difference between a life of misery and one of comfort is comparatively slight. This is a conclusion which may fairly be drawn from the observation that, although prostatic enlargement is common, only a small number of males thus affected can be said to suffer from it. Dr. Harrison's method is described by him as follows: After trying several plans for dividing the vas after passing through the external abdominal ring, subcutaneous and otherwise, the following appears to be the best: The scrotum having been shaved and prepared antiseptically, the tube is carefully sought for as it enters the scrotum. It being held subcutaneously in position between the finger and the thumb, a vertical incision through the skin is made over it to the extent of an inch or so. . The spermatic cord having been recognized, the vas is separated from the other constituents by the finger and forceps by merely carefully tearing away the connective tissue about it.

In doing this care should be taken not to drag on the testicle too much, but to support it while a loop of vas is detached, so that the connections of the former may not be loosened. The vas should be well cleared of all other textures, and then a loop of it is gently drawn out through the wound with a blunt hook. The loop is then encireled below the hook with a silk ligature not too thick, which is tightly knotted. The ligature is cut off short, the extraneous portion of vas removed by scissors, and the pedicle dropped into its place. The wound is closed with a catgut suture or two, and fitted with a small drainage tube. There is no bleeding worth mentioning if the operation is done in this way, and the wound usually heals in the course of a few days. He has reasons for believing that in a short time the vas, thus treated, becomes converted into a fibrous cord, which eventually, with the corresponding testicle, undergoes atrophy. If the vas, before the ligature is applied, is carefully cleared of other tissues, pain is not usually complained of, as is often the case when the whole thickness of the spermatic cord is included in a ligature, as is sometimes done in cases of castration. Both vasa may be so treated simultaneously, but he prefers doing one at a time. In the opinion he has formed as to the utility and propriety of dividing the vas in cases coming under this category he does not stand alone, and unless mistaken he anticipates that further evidence in support of it will soon be forthcoming. The literature, however, will already be found to confirm some of the conclusions he has thus ventured to formulate. Too much importance must not be attached to some experiments on animals which have been made in connection with this subject. The moral influence of certain conditions and the material changes they give rise to, in their relation to the genital function in the human male, find no counterpart in the animal species. In offering these remarks on this aspect of a most important subject, he does so in the belief that the case as he has endeavored to put it, though not fully proven, has been sufficiently made out by direct and indirect investigation as to warrant a fair trial being made of it before we adopt castration as a remedy for prostatic hypertrophy and certain of the troubles arising out of it. In a paper read since these remarks were made, Professor Guyon, of Paris, has added important testimony in favor of this proceeding. He publishes

the particulars of two cases of bilateral division of the vasa in men seventy years of age or thereabout, in which the benefits obtained were prompt and conspicuous, and in correspondence with effects already noted.—*New York Medical Record.*

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

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THE STORY OF A PICTURE.—In the estimation of professional service, the anxiety of the doctor is the only element that cannot be itemized, and is consequently beyond the power of compensation. It is the unknown quantity to the patient, but the ever-present and weighty responsibility with the one who is called to assist in the dire emergency. Every physician has felt it time and again, and has bravely and willingly bowed his best energies to the pressing burden. Its realization banishes all selfish purposes and focusses his best thoughts on the balance of chances between life and death. His only reward is the consciousness of highest duty done. Even the grim fatality of an inevitable defeat cannot cheat him of the crowning satisfaction of doing his best. It is comforting to know that such service is often appreciated by such as are in direct touch with the thrilling experiences of his life work. The sister professions are ever ready in their sympathies with failure and triumph, and are always generous in their tributes to the lofty purposes of ofttimes futile endeavor. The influences of such stimulation keep the doctor where he is, encourage him to do and dare alike in hovel and in palace, and place his best sevices beyond the power of gold to buy. Art more particularly has paid its homage to that better sentiment and has illumined it with the master touch of an interpreting genius. Thus, the doctor has become the central figure for the high light in many a pathetically truthful picture of our better humanity. And this is one of them that we study

with more than ordinary interest. The scene is in a humble cottage; the sick one, a weakly, dozing child, is tenderly pillowed on chairs in the centre of a poorly furnished room. The good doctor, with bending head and troubled brow, is gazing anxiously on the face of the little patient, the lamp shade tilted to give him the better view. It is the early hour of dawn. The glimmer of the coming day outlines the tired forms of the anxious parents at the adjoining window. The stern-faced father, weary with the night vigil, is resignedly awaiting the verdict. The heart-broken mother, overcome with anxiety, is resting her aching head, face downward, on the table. The empty baby-chair finds its significant place in the general disorder which marks the unconcern of a supreme trouble. It is the telling picture of sickness of an only child in the poor man's home, with the helpful doctor and the weak patient in the foreground. The high light is thrown on both with the grimness of an impending fate in the darkened offset.

The doctor's figure is the real study. His head is the expression of inherent power and his face the embodiment of assertive reliance. Every energy of a strong and generous nature is focussed on the mute appeal of a helpless and prostrate sufferer. The panting breath keeps time with the clock tick; the fluttering pulse is bearing away the life wave on the outgoing tide. The temperature is running its hot race with gaining death. What to do or not to do is the question of the moment. The interpretation of indications must be balanced by the logic of natural laws. And through it all he calmly weighs the record of his experience against an apparently inevitable decree. Never flinching until the end, his is the last appeal until the curtain drops. Thus he sits watching, while we interpret the higher motives of his broader mission. The beautiful picture has the simple title of "The Doctor," but needs not even that to indicate the apt suggestiveness of the true ideal. There is the stimulus of an actual presence with an ever-living experience which finds its response in the history of every professional life. It is among the poor that we perhaps see it in its better color, with the father the watcher, the mother the nurse, and the doctor the only earthly helper—the three offices exemplifying the cardinal virtues, faith, hope and charity. Thus the picture and the moral go

hand in hand to encourage us in our work and to reward us in its doing. Every physician who can look at or own such a picture must needs be proud of his title and glory in his calling. It is an inspiration in trouble and a crown in victory.—*N. Y. Medical Record.*

["The doctor is out!" What appalling news in time of illness. "Here is the Doctor!" and the dead weight of sickening responsibility rises and lightens and fades mysteriously. Surely he is one of the burden-bearing classes of mankind who do not get their due, nor anything approaching it.—ED. S. P.]

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A LEAN PEOPLE.—Americans are proverbially a dyspeptic race, with a few exceptions now and then among city aldermen, plethoric judges, and doctors who do a consulting practice, the total number of whom is not sufficient, however, to bring the average up to the normal standard. Leanness is due to the inability to digest and assimilate fat-making food. The non-digestion of starch is unquestionably one of the most common causes of disordered digestion. This is doubtless the chief cause of the extensive use of beef and other forms of flesh food in this country. Meat is readily dissolved in the stomach, and its digestion is not accompanied by the flatulence, acidity, and other distressing symptoms present in amylaceous dyspepsia. A beef diet is the most ready means of obtaining relief from these annoying symptoms, and hence is one of the most common diet prescriptions made by physicians, and one which is perhaps more frequently than any other made use of by patients for themselves. The result is relief from a certain set of symptoms, but at the same time the development of others which, if less disagreeable, are in the end not less serious. An exclusive meat diet robs the system of its proper supply of fat, and overwhelms the body with a great quantity of ptomains, leucomains, and tissue-poisons, which decrease the resistance of the body to disease.

Bouchard, Rogers, and others have shown that the poison-destroying function of the liver depends upon the amount of glycogen which it contains. This is almost exclusively derived from the starch of farinaceous foods; hence a person who, in consequence of inability to digest starch, confines himself largely to a

meat diet, is exposed to a double injury—the introduction of toxic substances into the system, and the lessened ability to destroy toxins and ptomains.

The dyspeptic who is suffering from the inability to digest starch, in exchanging a farinaceous for a flesh diet simply exchanges one class of morbid conditions for another, the biliousness or general toxæmia, the uric acid diathesis, and the resulting rheumatism, neurasthenia, and allied conditions which proceed from a meat diet being far more serious in their ultimate effects than the acidity, flatulence, and other annoying symptoms experienced from the indigestion of starch. The fermentation of proteids in the stomach, intestines, and colon, which always accompanies a flesh diet, produces toxic substances of a peculiar character, while the fermentation of starch results in the formation of acids and gases which are annoying and irritating, but not to any degree toxic. A certain amount of fat in the tissues is necessary as an aid to vital resistance. The excessively lean as well as the overfat person is more liable to attacks of disease than the person who possesses a normal amount of adipose tissue. Starved pigeons can be readily infected with certain microbial maladies against which they are found to be proof when well fed.

The substitution of a meat diet for one consisting of farinaceous foods, while a convenient mode of dissipating certain unpleasant symptoms, is, nevertheless, not the best remedy for this condition. What the patient requires is not the withdrawal of starchy foods, but the ability to digest them.—*Mod. Med.*

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THE WILLIAM F. JENKS MEMORIAL PRIZE.—The fourth triennial prize, of four hundred dollars, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "*The Etiology and Pathology of Diseases of the Endometrium, including the Septic Inflammations of the Puerperium.*" The conditions annexed by the founder of this prize are, that the "prize or award must always be for some subject connected with Obstetrics, or the Diseases of Women, or the Diseases of Children;" and that "the trustees, under this deed for the time being, can, in their discretion, publish the successful essay, or any paper written upon any subject for which they may offer

a reward, provided the income in their hands may, in their judgment, be sufficient for that purpose, and the essay or paper be considered by them worthy of publication. If published, the distribution of said essay shall be entirely under the control of said trustees. In case they do not publish the said essay or paper, it shall be the property of the College of Physicians of Philadelphia."

The prize is open for competition to the whole world, but the essay must be the production of a single person.

The essay, which must be written in the English language, or if in a foreign language, accompanied by an English translation, must be sent to the College of Physicians of Philadelphia, Penn., U. S. A., before January 1, 1898, addressed to Barton Cooke Hirst, M.D., Chairman of the William F. Jenks Prize Committee.

Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The Committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. The Committee reserves the right not to make an award if no essay submitted is considered worthy of the prize.

JAMES V. INGHAM,
*Secretary of the Trustees.*

N. E. Cor. 13th and Locust Sts.

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VOMITING IN PREGNANCY.—Vomiting in pregnancy is to-day one of the most difficult conditions with which the physician has to deal. The patient is seized with uncontrollable vomiting, is soon exhausted, and on account of the extremely delicate condition of the patient at the onslaught of these attacks, she not infrequently becomes dangerously ill. The attack is generally preceded by severe pains in the abdomen, accompanied by faintness, which is immediately followed by vomiting. The author has tried a great many remedies for this vomiting in pregnancy, and with varied results.

What is a remedy in one case may have absolutely no effect in another and similar case. However, I received a sample of

Ingluvin by mail about a year ago, and as I had at that time a very persistent case of vomiting in pregnancy, which had resisted all remedies I had used, I determined to try it. The patient was extremely emaciated from the continued vomiting, and was very despondent. I administered 10 grains at first, followed shortly after by another dose of similar proportion. The effect was quickly discernable. The vomiting decreased. I continued the treatment with most gratifying results. My sample being exhausted, I purchased a 1-ounce original package, and am glad to say that my patient went to full term uneventually and made a good recovery. She has rapidly regained her previous good health, and I attribute it to that matchless remedy, Ingluvin, and shall always prescribe it wherever indicated.

*Case* 2.—I was recently called to see Mrs. S. Examination proved her very anemic and emaciated, and at the time of the attacks of vomiting became very weak. Remembering my previous experience, I immediately prescribed Ingluvin, and had remarkable results, similar to case No. 1. I am confident that Ingluvin undoubtedly saved the life of this latter patient.—*From Monthly Retrospect of Medicine and Pharmacy.*

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THE PLAGUE AT HONG-KONG.—A report dated March 2d, received by the Marine Hospital Bureau from Dr. W. F. Arnold, U. S. Navy, stationed at Hong-Kong, China, says that the plague has assumed epidemic proportions at that place. The isolation of suspected individuals has ceased to be practiced, and all bills of health of the port state its prevalence, giving details of the precautions taken in cases where important mail steamers were concerned. It was also very prevalent in Canton and high up West River. Surgeon Arnold says that the disease is very fatal. With the exception of about a dozen mild cases that came about a month ago, at least ninety-five per cent. of observed sufferers have died, and that usually within the first four days of illness. —*New York Medical Record.*

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DEAD BEATS.—Bill Nye once said in a lecture: "A man may use a wart on the back of his neck for a collar button; ride

on the back coach of a railroad train to save interest on his money until the conductor comes around; stop his watch at nights to save the wear and tear; leave his 'i' or 't' without a dot or cross to save ink; pasture his mother's grave to save corn; but a man of this kind is a gentleman and a scholar compared to a fellow who will take a newspaper or magazine, and when asked to pay for it puts it in the office and has it marked 'refused.' —*Sanitarian.*

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and report of cures effected at the clinics of the Universities of Bonn and Griefswald, Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York-N. Y., sole agents.

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HÆMOSTATICS IN HÆMOPHILICS.—Dr. H. C. Howard, of Champaign, Ill. (*Amer. Jour. of Surg. and Gyn.*), has for twenty years used hypodermic injection of a saturated solution of tannic acid around the seat of the bleeding. Dissolve the acid by aid of heat. Make from three to six injections around the seat of the injury, using a saturated solution as hot as can be stood. Also inject hypodermically one twentieth of a grain of strychnine and repeat every two hours if needed. Strychnine by its influence upon the vasomotor nerves usually checks bleeding in a short time, but when the amount of blood lost is considerable it is best to adopt the above method of local treatment.—*Medical Mirror.*

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GENTLEMEN:—I have cured every case of Eczema in which I have used your Noitol, and look for results as much as when I prescribe Quinine in "chills and fever." Noitol is a grand, good thing.

STANLEY M. WARD, M.D.
Ellenville, N. Y.

# Editorial.

## AMERICAN MEDICAL ASSOCIATION.

*Forty-seventh Annual Meeting, Held in Atlanta, Ga., May 5, 6, 7 and 8, 1896,*

(From Telegraph to MEDICAL RECORD.)

GENERAL SESSION. FIRST DAY—TUESDAY, MAY 5th.

R. BEVERLY COLE, M.D., President, in the Chair.

The opening session of the forty-seventh annual meeting of the American Medical Association was called to order by the President, Dr. R. Beverly Cole, of San Francisco, at 10:30 A.M. After a prayer by Rev. Dr. McDonald, the address of welcome on behalf of the medical profession of Atlanta was delivered by Dr. F. M. Ridley.

The report of the Committee of Arrangements was then read by Dr. Westmoreland, after which came the President's address.

The President, R. Beverly Cole, M.D., of San Francisco, Cal., after a graceful and elegant acknowledgement of the honor conferred on him of Vice-President of this Association fifteen years ago in the city of Atlanta, and the additional duties and responsibilities of his present position, gave a thoughtful consideration to the following subjects: Lowering of the Standard of the Profession; Cut-rate Insurance Examinations; Foreign Practitioners in the United States; The Twelfth International Congress; Clerical and Medical Endorsements of Proprietary and Patent Medicines; and Unjustifiable Operations. His address elicited frequent manifestations of approval.

A memorial was presented from the Medical Association of the District of Columbia, praying that the American Medical Association take action to prevent the passage of a bill now before Congress prohibiting vivisection in the district. It this passed it would close the biological laboratories in the district, including those of the army, navy, and marine hospitals service, and would prevent all serious medical research in Washington.

A committee was appointed to consider the memorial and recommend action of the Association.

Dr. Marcy, of Boston, brought up the question of the Jenner centenary celebration, which it had been announced would occupy the whole of Thursday. Several gentlemen had prepared addresses, upon request of the committee appointed four years ago by this Association, but upon arrival here the members had found no mention of the centenary in the official programme, and nobody seemed to know when the celebration would be held. Dr. Marcy moved, therefore, that the entire afternoon of Thursday be devoted to the delivery of the addresses prepared for the occasion. This was strenuously opposed by many who would hear of no interference with the work of the sections for which they had prepared papers to be read. After much discussion it was decided to hear the addresses after the general session on Thursday morning.

Dr. Read, of Cincinnati, announced that the second Pan-American Medical Congress would be held in Mexico City in November next, and he moved that delegates be appointed by the Association to attend the Congress.

Dr. Love, of St. Louis, asked what had become of a proposed amendment to the constitution, which he had offered in Baltimore, making the office of secretary one to be voted for each year. There was no notice of such an amendment on the official programme. The Secretary, in reply, read from the minutes of the Baltimore meeting to prove that the proposal of the amendment had not been acted upon and had therefore died. On motion the meeting was then adjourned.

SECOND DAY—WEDNESDAY, MAY 6th.

The session was called to order by the Presidcnt promptly at 10 o'clock.

Dr. Westmorland reported in behalf of the Committee of Arrangements, and the Secretary read the usual announcements. An invitation was received from the Secretary of the Louisiana State Medical Society to the Association to attend the annual session of the Society in New Orleans on May 12th. It was accepted with the thanks of the Association.

It was resolved that hereafter the programme of the annual meeting of the Association be published in the *Journal* two weeks before the date of the meeting.

Dr. Love, of St. Louis, brought up the question of the secretaryship at the Baltimore meeting. He said the Nominating Committee had recommended the election of a new Secretary of the Association, but it was ruled that this was unconstitutional, and he called now for the reading of the section dealing with this matter. It was read and was found to provide that the Permanent Secretary should hold office until death, resignation, or removal by a two-thirds vote of the members present at an annual meeting. The speaker then said that he had introduced a proposed amendment to the constitution, providing for the annual election of the Secretary. This proposed amendment was not ruled out, yet it was not printed in the programme to be acted upon at this meeting, and he called for the reading of the minutes of the Baltimore meeting for an explanation of the omission. Upon the suggestion of the President the further discussion of this question was postponed until after the address on general medicine.

*The Importance of Fevers in the South.*—Dr. William Osler, of Baltimore, delivered the address on medicine with this title. Referring to the fact that humanity has but three great enemies—fever, famine, and war—he mentioned the interesting circumstances that three of the greatest benefits conferred on mankind have been in connection with fevers—the introduction of cinchona, the discovery of vaccination, and the announcement of the principle of asepsis. He then discussed in a brief manner the way in which the continued fevers had been differentiated during the present

century, and paid a tribute to the part which had been played in this work by the American students of Louis, the great French physician. The prevalence of typhoid fever in the United States was such as to make it to-day the fever of the country. He referred to its apparent increase in the smaller towns and in the country districts, and suggested that the profession in these parts should give very much more attention to local health matters. In the Southern States for many years typhoid fever was not supposed to be very prevalent, but of late physicians had begun to recognize that the increase was widespread.

He spoke of the necessity of knowing fully the complex and varied symptomatology of the disease, and of the unfailing accuracy with which it could now be differentiated from malaria. He then spoke of the contrast between the treatment of typhoid fever at the beginning and at the close of the century, and criticised strongly the so-called abortive and antiseptic plan of treatment which had been advocated in the journal of the Association. He then discussed the importance of the study of malaria in the South from the new standpoint of Laveran's researches, and urged that the younger physicians should equip themselves thoroughly for this work, referring to a number of problems which yet awaited solution. Lastly, the speaker took up the question of the existence of a third type of fever in the South independent of both typhoid fever and of malaria. He held that the evidence was not conclusive as to its existence. On the contrary, the trend of opinion seemed strongly in favor of the view that it was typhoid fever, although he confessed that further work was needed before the problem could be declared settled.

On motion the thanks of the Association were extended to Dr. Osler for his most suggestive address.

The discussion of the alleged suppression of Dr. Love's amendment was then resumed. The speaker said that the matter was one which he would gladly not have taken up, but when once he had introduced a resolution he was not willing to have it suppressed, especially by the person whom it affected. The representatives of every State in the Union had declared that they wanted a more efficient Secretary. One would suppose this would be sufficient to elicit a resignation from the undesired officer, but, as it was not, other measures must be taken.

Dr. McLean, of Detroit, ex-President of the Association, was asked if he had ruled the amendment out of order at the Baltimore meeting, but he said he had laid down all responsibilities at the close of that meeting, and he refused to reassume them by answering this question now.

On motion of Dr. Quimby, of Jersey City, the question was laid upon the table for one year.

Dr. Burt Ellis, of San Francisco, said that he also had introduced an amendment to the constitution at the Baltimore meeting, but there was no mention of this in the programme, and he called upon the Secretary for an explanation. The Secretary was about to read the amendment referred to, when a Philadelphia member objected strenuously. The objection was sustained. Then the reading of the minutes of the Baltimore meet-

ing was called for, but was hardly begun when the hour for adjournment came. The adjournment was appointed for noon, in order to give the members an opportunity to attend an old-fashioned Georgia barbecue at Lithia Springs.

THIRD DAY—THURSDAY, MAY 7th.

The session was called to order shortly before 10 o'clock. A call was made for the reading of the minutes of the Baltimore meeting, and this at once gave rise to a dispute as to what constituted the official record, whether the printed report in the *Journal* of the Association or the written minutes in the Secretary's book. As the discussion threatened to consume the entire session, the whole matter was laid on the table.

Dr. Montgomery then read the annual report of the Board of Trustees. It covered a period of eight months, ending December 31, 1895. There was at that time a balance in the treasury of $10,084.98. The loss to the *Journal* by the new policy as to advertisements, enforced upon the Trustees at the Baltimore meeting, was estimated at over $3,000. It was thought desirable that permanent quarters for the Association be secured, and the Trustees asked permission to establish a building fund. They also suggested that members of the Association who have been on the list for forty years and over should be entitled to be made honorary members and receive the *Journal* free of cost. On motion this report was accepted, and the Trustees were granted permission to establish a building fund.

Dr. George H. Rohe presented a report of the Committee of the Monument Fund, which stated that it had increased by $776 during the year —$550 from the new subscriptions and $126 from investment of funds already in hand. The total amount is now $3,787.

Dr. McLean, of Detroit, said that while all the members were very appreciative of the hospitalities of the different cities visited by the Association, he felt nevertheless that the entertainments were, and should remain, secondary to the scientific work, and therefore moved that future reception committees be instructed to provide for no entertainments which could in any way interfere with the work of either general sessions or sections. A resolution of similar import was read from the Executive Committee and was adopted, with the amendment that the Secretary be instructed to have the resolution printed upon the programme of all future meetings.

A second resolution of the Executive Committee provided that no entertainments be given on the first evening of any annual meeting, so that the dinners of the sections might be given on that evening.

*Address on Surgery.*—Dr. N. Senn, of Chicago, selected for his subject, "Some of the Limits of the Art of Surgery." He said modern surgery has attained a degree of development which entitles it to the distinction of a science and an art. As a science surgery is of recent date, having been founded and perfected during the last half of the present century. As an art it has been practiced for centuries by our ancestors

with credit to themselves and benefit to the injured, the crippled, and the sick. When Boyer wrote the introduction to his classic work on surgery he expressed the conviction that surgery had reached perfection. How little did he dream of the great changes that would be wrought in the practice of his cherished profession by the progressive pathologists and surgeons of the next few generations! What a contrast between the standing of the surgeon of to-day in the community, in the profession, and from a scientific aspect, as compared with his colleagues of only a century ago!

Modern pathology and the new science of bacteriology have laid a permanent foundation for the steady and progressive advance of surgical thought and work. The inflammatory complications of wounds and the etiology of most of the chronic infective surgical diseases have been cleared up by bacteriologic investigations during the last twenty-five years, and the knowledge thus gained has enabled the surgeon to prevent in a large measure the former, and to treat intelligently and with increased success the latter. The wonderful development of operative surgery during the same time is one of the earliest and richest fruits reaped from the vast and fertile field sown and cultivated by bacteriologists of every civilized nation. Antiseptic and aseptic surgery has smoothed the rough and rugged pathway of the practical surgeon. The almost universal introduction of antiseptic and aseptic precautions in the treatment of wounds in private and hospital practice has nearly eradicated the three greatest enemies of the surgeon of old, namely, hospital gangrene, erysipelas, and secondary hemorrhage, and minimized the occurrence of suppuration and its manifold immediate and remote complications.

In considering special work, Dr. Senn said that the furor operativus manifested in special departments of surgery, and its obvious results, render the standing and legitimate scope of the general surgeon very uncertain and indefinite at the present time. Let the general surgeon turn to the right or to the left, advance or retreat, and he finds himself on reserved territory. As for the physician, he is expected to answer night calls, prescribe for diarrhœa and whooping cough, watch cases of typhoid fever, measles, scarlatina, and small-pox, and should complication arise and he fail to report to the proper authority he renders himself liable to censure. Much of this ill-applied energy in the surgical world has resulted in detriment to patients and in retarding actual surgical progress. Operative surgery has been carried to extremes.

The speaker next passed on to the consideration of antisepsis and asepsis, saying that the marvellous reduction in the mortality following injuries and operations which the present generation has witnessed is largely due to the prevention of wound complications by the employment of efficient antiseptic and aseptic precautions.

*Phlegmonous Inflammation.*—The employment of antiseptic and aseptic precautions in the treatment of intestinal and accidental wounds has greatly diminished the frequency of progressive phlegmonous inflammation and its often disastrous consequences. That such an occurrence cannot alway

be prevented, even by the most scrupulous care and attention to details, every surgeon of experience is willing to admit. In the most virulent forms of phlegmonous inflammation the most heroic and timely treatment, local and general, is often fruitless in averting speedy death. In the most desperate cases the surface lesion is often insignificant; the infection, following the lymphatic pathways, soon reaches the general circulation, resulting in death from acute sepsis before any decided gross pathologic lesions have appeared at the seat of infection or in any of the internal organs. How rapidly general infections may take place has been shown by the experiments of Schimmelbusch, who found microorganisms in the spleen five to ten minutes after infection of a wound. Colin and Niessen demonstrated by their experimental work that amputation a few minutes after inoculation of the ears and limbs of rabbits with pure cultures of anthrax did not protect the animals against generalization of the disease. Such cases in the human being fortunately are seldom met with, but when they do occur the art of surgery is powerless in arresting the progress of the disease. Parenchymatous injections of solutions of carbolic acid or corrosive sublimate along the course of the inflamed lymphatics and the internal use of alcohol in heroic doses promise the most, but in the great majority of cases the extension of the infection continues and terminates speedily in death from general sepsis. In the treatment of diffuse phlegmonous processes it is now customary to make free incisions, establish free drainage, and disinfect the cavity by flushing it freely with a safe and yet efficient antiseptic solution, such as a saturated solution of acetate of aluminium, a 3 per-cent. solution of carbolic acid, or a 1 to 5,000 solution of corrosive sublimate, and apply to the part hot compresses wrung out of the same solution.

Closely allied to phlegmonous inflammations of the soft tissues is acute suppurative osteomyelitis, as it is caused by the same kinds of microbes and results in more or less extensive destruction of tissue. The etiology and pathology of this disease are now well understood, and upon them is based the early operative treatment, which is generally indorsed by the profession at the present time. The early removal of the osteomyelitic product by operative interference, as a rule, relieves pain promptly, limits necrosis, guards against joint complications, and recognizes the danger from general sepsis. Immobilization of the affected limb in proper positions, and the exposure of the osteomyelitic focus by the use of the chisel or gouge as soon as a positive diagnosis can be made, are the modern resources which have succeeded in greatly reducing the mortality from this disease as well as its immediate complications and remote consequences.

*Tuberculosis of Joints.*—The speaker said that only a few years ago the surgeons who paid special attention to diseases of the joint were enthusiastic advocates of early resection or arthrectomy in cases of tuberculous joint affections. It was believed that such medical treatment would succeed in eliminating the local affection and in preventing the extension of

it to distant organs by reinfection from the peripheral focus. Statistics prove that these hopes are unfounded, and conscientious surgeons have substituted largely in place of operative treatment conservative measures. A change in practice has taken place, largely due to the beneficial effects obtained from intra-articular and parenchymatous injections of iodoform and glycerin. Dr. Senn has resorted to this treatment in hundreds of cases with the most satisfactory results. In about one-half or two-thirds of all cases of uncomplicated joint tuberculosis this treatment proves curative. It is of special value in the treatment of tuberculous abscess in communication with a tuberculous joint or bone. From one to three or four injections usually suffice in obliterating the abscess cavity.

*Cancer.*—Coming to the subject of malignant tumors, he said the essential cause of carcinoma and sarcoma remains to be discovered. The science of surgery must first divulge the true nature of tumors before we can expect a decided advance in their more successful treatment. The essential features of the modern treatment of malignant tumors he summed up very briefly as follows: Operate early and thoroughly. The treatment of inoperable sarcoma by injections of the sterilized toxins of the streptococcus of erysipelas and the bacillus prodigiosus has not equalled the expected results.

*Brain Surgery.*—In the orator's opinion, operative interference is absolutely indicated in fractures of the cranial vault under the following circumstances: (1) All open fractures, including gunshot and punctured fractures. (2) Depressed fractures attended by well-defined symptoms caused either by the depression or intra-cranial complications. (3) Rupture of the middle meningeal artery with or without fracture of the skull. The indiscriminate use of the chisel and the trephine in the hands of the inexperienced practitioner is fraught with danger and should not be encouraged by teachers and expert surgeons. Cerebral localization and aseptic surgery have made it possible to treat a few intracranial lesions successfully by direct operative interference.

*Surgery of the Abdomen.*—The abdominal cavity was largely a terra incognita to the surgeon of less than half a century ago. To-day it is the favorite battle-ground of the average surgeon and the select field of the so-called abdominal surgeon. Notwithstanding the wonderful improvements in the technique of operations upon the stomach, partial gastrectomy and pylorectomy have yielded anything but encouraging results. In nearly fifty per cent. of cases the patients subjected to radical treatment for malignant disease of the stomach succumbed to the immediate effects of the operation. Dr. Senn said he had opened the abdominal cavity for the surgical treatment of malignant disease of the stomach nineteen times, and in only one case did he find the disease limited to the organ first affected, and in this case the general health of the patient had been so broken down by the obstructive pyloric carcinoma as to contraindicate a radical operation. In all of the remaining cases a pylorectomy or partial gastrectomy was out of the question, as the carcinoma of the pylorus or stomach had

extended to adjacent organs or had given rise to regional infections through the lymphatic glands sufficiently to contraindicate any attempts at radical removal of the disease.

*The Generative Organs.*—Dr. Senn next considered at length the organs of generation, saying that the greatest onslaught of modern surgery has been upon the organs of generation, male and female. The future historians who will record the work of many gynecologists belonging to the present generation will have reason to express their surprise at the disasters the art of surgery has produced when plied in cases far in advance of a scientific foundation. Here and there we hear a feeble voice protesting against the indiscriminate surgery upon the organs of generation of the opposite sex, but the mutilating work continues in spite of such opposition and well-meant advice. Dr. Senn said that when he arraigned the gynecologists before such a representative body, composed of representative medical men of this country, for innumerable and inexcusable transgressions of the rules which ought to govern and control the art of surgery, he did not include the scientific, conscientious workers in that department of surgery, but his remarks applied to a class of routine operators which had recently grown to alarming dimensions, not only in this, but in nearly every country which has been penetrated by the dim rays of so-called bold surgery. The new generation of doctors no longer finds satisfaction in practicing in some rural district. Its members have their eyes on large cities, and have heard of enticing fees paid to specialists for insignificant operations. Why buy a horse and saddlebags when a fortune awaits them in devoting themselves to a specialty, more particularly gynecology? The recent graduate or the man who has become disgusted with country practice seeks a much-employed gynecologist, follows his work for a month or two, and returns to his prospective field of labor a full-fledged specialist. He is now ready to extirpate the uterus, remove ovaries and fallopian tubes, sew imaginary lacerations of the cervix and perineum. Do you suppose that such an aspirant for gynecological fame ever examines a woman and finds her perfect? Is it not true that in nine out of ten cases he finds something to mend? In order to show that the speaker's views were real and not visionary, he related a few instances.

Laceration of the perineum is another subject of the amateur gynecologist. The extent of laceration and the symptoms caused by it are not always carefully considered in deciding upon the propriety of an operation. Dr. Senn said that to do an operation on the perineum in five or seven minutes still serves as an attraction for the lookers-on in many private hospitals and gynecological clinics. He fully appreciates the value of a well-performed perineorrhaphy in proper cases, but he was equally well satisfied that the operation has often been performed unnecessarily, and that it requires more than five or seven minutes to perform it properly.

The frequency with which women are being castrated is one of the most flagrant transgressions of the limits of the art of surgery. It is not unusual for one operator to exhibit from five to six normal ovaries as the

result of half a day's work. All kinds of excuses are made for this kind of surgery. Dr. Senn asked the question: Where is this wholesale unsexing of our female population going to end? The beginning of the end has come. The army of women minus their essential organs of generation is beginning to raise its voice against such mutilating work. The number of women who willingly sacrificed their ovaries to restore their shattered health without securing the expected relief has increased to an alarming extent. This sad experience has made the gynecologists more desperate and bold. It is difficult to say where this rage for the removal of the female sexual organs will end, or what organ will be the next battle-ground for the aggressive gynecologists. The clitoris, the vagina, the cervix uteri, the ovaries, the fallopian tubes, the uterus and its ligaments have successively passed through a trying ordeal of operative furor. What the next fad will be is impossible to foretell.

He could not dismiss the subject of genital surgery without making a strong plea in favor of conservatism in the treatment of prostatic hypertrophy. Reference was made to the experiments of J. W. White on animals in this connection; also to the clinical experience of Ramm, whose results covered about the same ground as those of White, and who urged the utility of castration as a legitimate surgical procedure in the treatment of non-malignant obstructive enlargements of the prostate. The reason the speaker alluded to this subject was this: He feared that when this operation on aged men for hypertrophy of the prostate becomes common property and is indorsed by surgeons of high standing, it would be misapplied in the same way, probably to a lesser extent than the removal of normal ovaries. Men will be castrated for stone in the bladder, chronic cystitis, and malignant disease of the bladder. It is not always easy or possible to make a positive differential diagnosis between simple hypertrophy of the prostate and some of the conditions which simulate it so closely. In doubtful cases it appears to him it would be advisable to make the diagnosis sure by a suprapubic cystotomy before resorting to a mutilating operation, rather than remove the testicles and later discover a bladder or encysted stone or malignant disease of the bladder or prostate. Castration is such an easy operation that every tyro in surgery will be tempted to perform it upon willing subjects suffering from obscure affections of the bladder complicating hypertrophy of the prostate gland. The Ramm-White operation deserves a fair trial at the hands of competent surgeons, in well-selected cases, but Dr. Senn apprehends evil in the future, not so much from the proper use as from the abuse of this procedure.

Finally, he had written and delivered his address with malice toward none, in the interest of the suffering portion of our population, for the true advancement of the science and art of surgery, and as a plea for recognition of the good work done by the great mass and backbone of our profession, the modest, toiling, inadequately remunerated general practitioner.

On motion the thanks of the Association were extended to the author of the address.

The report of the Secretary was then read and accepted. That of the Treasurer was not read, as this officer was absent.

The report of the Committee to consider the memorial of the Medical Association of the District of Columbia was presented. The Committee presented a resolution that the Association should protest earnestly against the adoption of Senate Bill 1,552, prohibiting experiments on animals in the biological laboratories in the district, and asked that an impartial investigation be made to determine whether charges of cruelty brought by the Humane Society, upon the strength of which the passage of this bill was urged, were true or false. Dr. Garcelon, of Maine, opposed the resolution, but after an eloquent appeal by Surgeon-General Sternberg it was unanimously adopted, and the Secretary was instructed to send a copy of the resolutions at once to the Commissioners of the District of Columbia.

The Judicial Council reported that no members of the Cleveland Medical Society should be admitted to membership in the Association as delegates from that or any other Society. A communication was received from the New York County Medical Association reaffirming its allegiance to the code of ethics of the American Medical Association.

The programme of the Jenner centenary, to which it had originally been decided to give all of Thursday, was then read, and it was agreed that the rest of the day should be given to the addresses. The general session was then adjourned and the Jenner celebration was begun. The character of Dr. Jenner and the history of his discovery of the protective value of vaccination were the subjects of the first address. In the absence of its author, Dr. N. S. Davis, the paper was read by Dr. Didama, of New York State. The paper recounted the well-known facts concerning the life of Jenner and the manner of his great discovery, the story being told in an interesting way. Dr. H. R. Storer, of Rhode Island, gave a list of the Jenner memorial medals, tablets, portraits, etc.

*Scientific Researches Relating to the Specific Infectious Agent of Small-pox and the Production of Artificial Immunity from this Disease* was the title of an address by George M. Sternberg, M.D., LL.D., Surgeon-General U. S. Army.

The experimental evidence relating to the nature of the specific infectious agent of vaccine and of variola was reviewed; also that relating to the genetic relation of cow-pox, horse-pox, and small-pox; and that relating to the production of artificial immunity by subcutaneous inoculations with vaccine lymph and by subcutaneous or intravenous injections of blood serum from immune animals.

"The Propagation, Preservation, and Use of Vaccine Virus" was the title of an instructive address by Dr. Francis E. Martin, of Massachusetts. C. F. McGahan read for Dr. C. N. Hewitt, of Minnesota, "A Tribute to the Memory of Edward Jenner." "The Statistical Evidence of the Value of Vaccination to the Human Race" was the title of the closing address by Dr. Eugene Foster, of Georgia. The celebration was under the auspices of the American Medical Association and of the American Public Health Association.

On motion of Dr. Didama, the thanks of the Association were t en dered to the writers of the preceding papers.

On motion the Association adjourned.

FOURTH DAY—FRIDAY, MAY 8.

The Association was called to order at 10 a. m. by the President.

The Address on State Medicine was next in order, but before delivering it Dr. Geo. H. Rohe, of Maryland, read the following telegram from Dr. Albert L. Gihon:

"Announce that the Navy Department assigns a site for Rush monument in park facing Naval Museum of Hygiene."

Dr. Holton moved that a vote of thanks be tendered to the Naval Department for its generous offer.

Seconded and carried.

Dr. Rohe then delivered the Address on State Medicine. He selected for his subject "The Purification of Water Supplies."

On motion of Dr. Ellis, a vote of thanks was extended to Dr. Rohe for his able paper.

Dr. Quimby—I move that the Address on State Medicine be printed in pamphlet form for disttibution throughout the States.

Dr. D. W. Graham, of Chicago—I move as a substitute that the editor of the JOURNAL of the American Medical Association be instructed to furnish copies of this Address at cost to all who may apply. Seconded.

Dr. Quimby—I accept the substitute.

The substitute was then put by the Chair and carried.

Dr. Bulkley, of New York—The Executive Commistee report the following resolutions and recommend their adoption:

*Resolved*, That in accordance with the standing rule of the Association, the Committee of Arrangements for the next session is requested to arrange the meetings of the Association and prepare a programme for the Sections so that they will not conflict. It is suggested that if the general sessions on Wednesday and Thursday be called at 11 o'clock it may remedy the difficulty.

Dr. Love—I think the resolutions are all right, but they specifically suggest that the Committee of Arrangements prepare for the next meeting. I would suggest for all future meetings.

The President—I presume that was contemplated.

*Resolved*, That the Committee of Arrangements for next year and hereafter be directed to prepare signs for each State and Territory, also for the District of Columbia, and the Army, Navy and Marine Hospital Service, and to locate them in the hall of meeting that the delegates shall meet beneath them for the selection of members of the Nominating Committee.

*Resolved*, That the elections for such members of the Nominating Committee shall only be legal when held in these localities.

*Resolved*, That elections shall be held not sooner than 10, nor later

than 30 minutes after adjournment of the first general session of the Association.

Dr. J. T. Priestley, of Iowa—Supposing a delegate arrives here on the second day, how is he going to get representation on the Nominating Committee?

The President—He must try to get here on the first day.

The resolutions were then adopted.

Dr. Bulkley—The President in his annual Address spoke of our not having a Council such as the British Medical Association, in order that action on matters that are referred to it might be taken between the sessions. Your Executive Committee has had this point under considerat tion and have prepared the following:

*Resolved*, That there be an Executive Council of five consisting of the three officers of the Executive Committee, and two members chosen by election. Of this Council of five, one must belong to the Section on Practice of Medicine, and one to the Section of Surgery and Anatomy. To this Executive Council shall be delegated all the duties of the Executive Committee during the intervals between its meetings.

The President asked whether this resolution interfered in any way with the operation of the Constitution, to which the Secretary replied: No.

Dr. X. C. Scott—It strikes me that this is an amendment to our By-Laws and, therefore, it must lay over until next year.

Dr. I. N. Love—We already have an Executive Committee to conduct the business of the Association, which is made up from the various Sections, and it seems to me that this Committee, being democratic and representative in its character, is all-sufficient. It is not desirable to complicate our records by too many resolutions, and I therefore move that this resolution be laid on the table. Seconded and carried.

Dr. Bulkley—As this resolution has been thought to be an amendment to the Constitution, I offer it to-day through the Executive Committee as an amendment.

The President—To be acted on next year?

Dr. Bulkley—Yes, sir.

The Executive Committee called the attention of the Association to the By-Law requiring titles of papers and abstracts to be sent to the Secretaries of Sections one month previous to the date of the annual meeting and asks that it be enforced.

Dr. James F. Hibberd, of Indiana—What means have we of enforcing this By-Law?

Dr. Bulkley—The Chairman of each Section should be directed not to receive papers later than thirty days prior to the time of meeting. For example, I finished my programme and sent it to the JOURNAL almost three weeks before the meeting. It seems to me there is no good reason why titles of papers can not be sent in two or three weeks prior to the meeting, also abstracts of the same.

Dr. Hibberd—Are we to understand that unless papers are received

thirty days preceding the meeting of the Association that they will be excluded from presentation?

The President—I do not so understand it. It is simply a call upon those who contemplate furnishing papers to have them ready thirty days before the meeting.

Dr. Hibberd—Supposing the papers are not ready at this time, are they to be accepted?

The President—That remains with the officers of the various Sections.

Dr. Hibberd—A regulation that has nothing to enforce it is good for nothing, sir.

That is quite so, sir.

Dr. Bulkley—We have not offered any resolution at all, but simply called attention to a By-Law. It is an old By-Law and heretofore it has not been enforced. I move, therefore, that the Secretaries and Chairmen of Sections, and the Local Committee of Arrangements, and all who are concerned in the preparation of the programme, be directed not to receive and put the titles of papers on the programme unless the authors of such papers comply with the rules, namely, thirty days before the meeting. Seconded and carried.

### PERMANENT LOCATION OF JOURNAL.

Dr. Gracelon, of Maine—I have in my hand a resolution which I wish to present in order to save time. The resolution is as follows.

WHEREAS, This Association has authorized the Trustees to establish a building fund; and

WHEREAS, The question of a permanent location for the JOURNAL has never been decided by a vote; therefore, be it

*Resolved*, That the Trustees be and are hereby instructed to cause a vote by ballot to be taken, and on this question all members shall have the right to vote. That ballots may be received from and after June 1 until July 31, when the ballot shall close, No ballot shall be counted in favor of any particular place, unless the name of the member voting shall be signed thereto. The ballots shall be preserved by the Trustees until the next annual meeting of the Association, but the result shall be published in the JOURNAL when the count shall have been completed.

Seconded and adopted.

The Report of the Committee on National Department of Public Health was then read by Dr. J. Cochran, as follows:

### REPORT OF THE COMMITTEE ON DEPARTMENT OF TUBLIC HEALTH.

Our Committee was appointed in 1891 with the object in view of securing the passage of a law creating a National Department of Public Health with a Secretary of Public Health at the head of it with a seat in the Cabinet of the President of the United States. The bill which was prepared for presentation to Congress was extremely crude and indefinite in its provisions, and gave this high official very little import nt

work to do. It was indeed found to be so defective that last year the effort to have it enacted into a law was abandoned.

In the meantime, the Marine-Hospital Service, which in 1890 had already been invested with some important health functions, was by the Act of 1893 converted into a National Health Department with very large and far-reaching powers and abundant means. It is not called a department of public health, but is a Department of Public Health in fact.

Since 1893 until the effort was abandoned last year, our Committee has been engaged in the hopeless and unwise enterprise of endeavoring to induce Congress to establish another department of public health—a very weak and inconsiderable department by the side of a very powerful department. Such an effort could not succeed. Such an effort did not deserve to succeed.

It seems to us to be a fundamental proposition that we shall have but one National Department of Public Health. This being conceded, one of three courses remain open to us:

1. We may devise and advocate a plan to deprive the Marine-Hospital Service of the public health functions, and for the establishment of an entirely new department; or,

2. We may accept the Marine-Hospital Service just as it stands as a department sufficient for our present use; or

3. We may endeavor to improve the Marine-Hospital Service and make it a more satisfactory National Health Department than it now is.

It would seem that this last method promises to be the most fruitful of beneficial results; and the question then arises as to the modification that may be wisely made in the existing law.

In arranging any scheme of national public health supervision it would seem desirable that nothing should be done to discredit and weaken the various State Boards of Health. But that contrarywise the effort should be to strengthen the State organizations, and to foster and facilitate their further evolution. If this principle is conceded it is at once made evident that the National Department of Public Health should act in and through the State Boards of Health, in co-operation and in harmony with them, and not outside of them and independent of them. If the National Department acts within the States independently of the State Boards, and assumes the work that ought to devolve upon the State Boards, then the State Boards become comparatively useless institutions and will fall into disfavor. Some of the State Boards are still weak institutions, and any rivalry between them and the National Department in State work would doom them to speedy destruction. In this direction it would seem that additional legislation is needed, and the simplest plan to reach the desired reconciliation would embrace two provisions:

1. That the National Department should act within the States by and through and in co-operation with the State Boards.

2. That the head of the National Department should call annually to

meet in the City of Washington an Advisory Council to be composed of one representative from every State Board of Health. This would bring abont mutual understanding and co-operation and reciprocity of action, and would virtually constitute a great central school of public hygiene.

Such a scheme as this would probably command the approval and support of the National Conference of State Boards of Health, which Conference is quite as deeply interested in movements of this character as is the American Medical Association.

As the conclusion of the whole argument, we recommend that we be authorized to draw up a new bill along the lines we have indicated, and that we be authorized to invite the co-operation of the Conference of State Boards of Health and the American Public Health Association in our endeavor to have the proposed bill enacted into law.

All of which is respectfully submitted.

JEROME COCHRAN, M.D., Chairman Com.

Dr. Hibberd—I move that the report of the Committee be accepted, the plan outlined adopted, the Committee continued and enlarged by the appointment of a member from each State. Seconded.

The report was then adopted.

The Secretary then read some resolutions referred to the General Session by the Section on Materia Medica, Pharmacy and Therapeutics on the adoption of the metric system of weights and measures.

On motion the resolutions were adopted.

Dr. N. Senn, of Chicago, offered the following resolution:

*Resolved*, That the Secretary be instructed to notify the Secretary-General of the International Medical Congress that unless the English language be recognized the American Medical Association declines to send delegates.

Vice-President Le Grand put the motion to adopt the resolution, and it was unanimously carried.

The report of the Committee on Nominations was now in order and was read by Dr. H. A. West. The report is as follows:

REPORT OF COMMITTEE ON NOMINATIONS.

Your Nominating Committee presents the following names for office during the ensuing year:

President, Dr. Nicholas Senn, Illinois.

First Vice-President, Dr. Geo. M. Sternberg, Washington, D. C.

Second Vice-President, Dr. Edmond Souchon, Louisiana.

Third Vice-President, Dr. J. B. Thomas, Pennsylvania.

Fourth Vice-President, Dr. Willis F. Westmoreland, Georgia.

Treasurer, Dr. Henry P. Newman, Illinois.

Assistant Secretary, Dr. T. B. Schneideman, Pennsylvania.

Librarian, Dr. Geo. W. Webster, Illinois.

Chairman of Committee of Arrangements, Dr. H. A. Hare, Pennsylvania.

Trustee to fill vacancy, Dr. G. C. Savage, Tennessee.

Trustees, Dr. E. E. Montgomery, Pennsylvania; Dr. J. M. Mathews, Kentucky, and Dr. C. A. L. Reed, Ohio.

Judicial Council, Dr. Geo. W. Stoner, U. S. Marine Hospital Service; Dr. C. W. Foster, Maine; Dr. J. McFadden Gaston, Georgia; Dr. I. N. Quimby, New Jersey; Dr. H. Brown, Kentucky, and Dr. X. C. Scott, Ohio.

Address in Surgery, Dr. W. W. Keen, Pennsylvania.

Address in Medicine, Dr. Austin Flint, New York.

Address in State Medicine, Dr. J. Cochran, Alabama.

On motion the report of the Nominating Committee was unanimously adopted.

The President then appointed Drs. Holton and Quimby as a Committee to escort the President-Elect to the platform, who was presented to the Association by the retiring President, Dr. Cole.

After the round after round of applause with which he was greeted had subsided Dr. Senn made a few brief but appropriate remarks, acknowledging the honor conferred; he placed the Code of Ethics on the same plane as the Constitution of the United States, saying: "Let us preserve the constitution of this great institution, lest it may totter, tumble and crumble into dust," winding up with the following:

"In conclusion, I desire to thank you heartily for the distinguished honor conferred upon me, and I will promise you my best efforts in performing the duties of this office." (Applause.)

On motion of Dr. Quimby, the thanks of the Association were extended to the ladies, to the citizens, and to the local profession of Atlanta for their kindness and hospitality; also to the Southern Railway Company for its liberality.

Dr. Greenley, of Kentucky, moved that the thanks of the Association be tendered to the retiring President for the efficient and able manner in which he had discharged his duties.

Seconded and unanimously carried.

On motion of Dr. Scott, the Association then adjourned to meet in Philadelphia the first Tuesday in June, 1897.

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MORNINGSIDE RETREAT is the name of a new and most admirable institution for the care and treatment of Mental and Nervous Diseases, Alcoholism, Morphinism, etc., located in one of the most eligible suburban sites of Nashville. Less than two miles from the central portion of the city, accessible to the electric car lines, yet it is perfect in its adaptation. The quietude and repose of the locality are striking; the handsome and spacious lawn of fourteen acres, shaded by a natural growth of magnificent forest trees, a splendid modern constructed building, heated by steam and lighted with gas, combined with every necessary appliance will enable its efficient medical staff to secure the most satisfactory success.

The Superintendent, (resident), Dr. John H. Callender, with an unusually large practical experience in the care of nervous and mental

diseases extending over nearly a third of a century, is so well and widely known that commendatory statements on our part are entirely out of place. His associate, Dr. S. S. Crockett, Professor of Anatomy in the Medical Department of the University of Nashville, is one of the rising medical men of Tennessee's capital, full of energy, active in resource, fully qualified, and needs only to be known to be appreciated and esteemed.

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AN AGREEABLE, FINISHED PHARMACEUTICAL PRODUCT.—I find Sanmetto a preparation of merit, combining the desirable properties of sandal wood-oil and saw palmetto in an agreeable, finished pharmaceutical product. I have found it of particular value in sub-acute and chronic inflammatory disorders of the genito-urinary system. Our druggists carry it in stock, and I have already found frequent occasion to prescribe it.

J. HOBART EGBERT, M.D.

Holyoke, Mass.

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I AM not in the habit of giving testimonials, and certainly would not do so until I had given the remedy a thorough and satisfactory trial. I have used Seng since first placed on the market, and in no case has it failed me. It is truly a physician's friend in all forms of indigestion and malnutrition, and especially indicated in malarial or typhoid fevers, malarial dyspepsia, and irritable stomach.

O. M. BROWN, M.D., Hockley, Texas.

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MARRIED at Carthage, Panola County, Texas, Sunday evening, May 3rd, Dr. J. A. Daniels to Miss Stella, daughter of Col. A. C. Boynton. Our best wishes are tendered the happy pair. "May they live long and prosper."

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THE SOUTHWESTERN KENTUCKY MEDICAL ASSOCIATION held its twenty-fifth annual meeting at Paducah, Ky., the 12th and 13th ult. It has a membership of 250. Quite a number of able and instructive papers were read, followed by lively and interesting discussions. Dr. J. T. Reddick, of Paducah, Ky., was elected President for the ensuing year.

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THE attention of our readers is called to the advertisement of the Robinson-Pettet Company. This house is one of long standing, and enjoys a reputation of the highest character. The preparations referred to, we commend specially to the notice of practitioners.

# THE SOUTHERN PRACTITIONER.

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*DEERING J. ROBERTS, M.D.,* - - *Editor and Proprietor.*

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## Original Communications.

### HYPERTROPHY OF PROSTATE.*


BY W. FRANK GLENN, M.D., NASHVILLE, TENN.


Before entering directly into the subject of this essay, it would be beneficial to briefly review the anatomy of the prostate. The prostate is the size and shape of a large chestnut with its base directed backwards toward the bladder neck, its apex forwards toward the deep perineal fascia, which it touches. The prostate is perforated by the posterior urethra, which usually lies one-third nearer its upper than its lower surface, at which time it receives the ejaculatory and prostatic ducts. The prostate is enclosed in a thin but very strong fibrous capsule, separate and distinct from that derived from the deep perineal fascia, a plexus of veins separating them. In intimate structure the prostate consists of numerous glandular follicles, opening into elongated canals, finally joining to-

*Read before the 63rd annual meeting of the Medical Society of the State of Tennessee.

gether to form twelve to twenty ducts. These glandular follicles are connected together by areolar tissue supported by bands from the fibrous covering which traverse the gland in every direction. It also has muscular layers, which are arranged so as to encircle the urethra. The prostate secretes a pale, mucilaginous fluid of an acid reaction.

This gland is subject to acute inflammation, to chronic inflammation, to tuberculous infiltration; but it is to none of these conditions that I wish to call attention, but to another condition, a genuine enlargement and increased growth of its substance, a true hypertrophy. This condition consists in an overgrowth of all its structures, glandular, muscular, and fibrous. There is a distinct tendency in the fibrous and muscular elements to arrange themselves into nodules which are very friable and can be shelled out easily, even during life. The steady growth of these nodules causes them to protrude at the points which offer least resistance, namely, the vesical and urethral surfaces. An hypertrophied prostate therefore seldom retains its original shape, but presents a deformity as well as an enlargement, caused by tumors projecting into the bladder and urethra. We consequently have an hypertrophied prostate assuming a great diversity in size and shape. The growths occur most frequently in the middle and lateral portions of the organ, called lobes by the ancients, a term we still retain for sake of convenience. They are also found in the body of the organ projecting into the urethra or arching its vesicle orifice like a horseshoe or collar. The size may vary from the smallest perceptible increase in dimensions to the size of a large orange, and has been known to fill the true pelvis. This hypertrophied state of the prostate is truly a condition of age, and seldom exists to an extent to cause serious trouble before the age of forty-five. A few exceptional cases have been observed, however, one at thirty-six, one at twenty, and a remarkable case reported by Dr. W. G. Mudd, of St. Louis, in a child five years of age, in whom true prostatic hypertrophy existed.

Whatever be the form and location of these growths, there are three morbid conditions nearly always produced:

1. Distortion of the prostatic urethra, changing its direction, decreasing its caliber, and often elongating it.

2. Elevation of the vesical orifice of the urethra.

3. Obstruction of the blood in the vesical veins, as they empty into the prostatic veins.

As a result of these morbid conditions, there follows

very quickly decrease in the force of the urinary stream, imperfect emptying of the bladder, consequently residual urine (which increases with time), catarrhal inflammation of the bladder, and a more frequent desire to urinate than normal. This last condition (namely, frequent urination), is generally the first notice which the patient takes of his condition, and on account of which he consults a physician. It is caused at first by venous congestion, consequently worse at night, while the body is inactive and the circulation sluggish. Later on an irritation of the bladder neck ensues, and the frequent urination then becomes manifest in the day time, as well as night. It will be aggravated by constipation, which causes an overloaded rectum.

In the course of future years, other morbid conditions naturally ensue.

On account of the increase of residual urine, dilatation of the bladder gradually comes on, thickening of its muscular coat, depression of its lining membrane between the thickened muscular walls (diverticulae), a tendency to alkaline fermentation of the urine, catarrhal inflammation of the bladder, which may, and does, extend to the ureters and pelvis of the kidney, dilatation of the ureters and pelvis of the kidney, with stagnation of the urine in them, pyelitis and pyelonephritis. Uraemia may come on and cause death. On account of the residual urine and constant alkaline fermentation, a strong tendency to the formation of phosphatic calculi exists.

The first symptoms of prostatic hypertrophy which usually attract the attention of the sufferer, are those of an irritated bladder neck, a frequent and rather urgent desire to urinate, which is accomplished slowly and with little force, the stream tending to fall down between the feet. In the earlier stages there is frequently constitutional disturbance, which the patient describes as feeling bilious, dry tongue, slight fever, and general languor. There is also in the earlier stages frequently a large increase in the quantity of urine with a light specific gravity resembling diabetes insipidus, for which it is frequently mistaken. As time goes on the symptoms become aggravated. Especially does the residual urine increase until it may keep up such a constant pressure as to cause an involutary dribbling of the urine, frequently mistaken for paralysis by the general practitioner. The quantity of retained urine in some old cases is sometimes enormous. In a recent case in which the writer was in consultation, there was an

enormously distended bladder, and constant dribbling; the incredible quantity of fifty-four ounces of urine was drawn at one sitting by the attending physician. When any, or all, of these symptoms are present, especially in a man over forty years, the prostate should be suspected, and most careful physical examination made. The finger in the rectum will convey a good idea of the extent of the enlargement in that direction, yet in some cases the prostate may be considerably enlarged on the rectal surface and not sufficiently on the urethral, or vesical, to interfere but little, if any, with the complete emptying of the bladder. Its urethral surface should therefore be carefully examined with bougies or catheters.

In some cases considerable benefit can be derived from an endoscopic examination with a long tube, also with the cystoscope. Having by a most careful and delicate examination (avoiding all force or roughness) diagnosticated an hypertrophied prostate, the conclusion should not be jumped at that a complete diagnosis has been made. We may have accompanying this hypertrophy to contend with degeneration of bladder walls, tuberculosis or cancer of the prostate, stricture of the urethra. Stone in the bladder is also the natural sequence of a constant residual urine of strong alkaline reaction, and is very frequently found. About four weeks since, in removing the middle portion of an enlarged prostate in a man seventy-two years of age, I removed a stone as large as an ordinary hickory nut.

Having determined that prostatic hypertrophy is alone responsible for the symptoms, before deciding upon a plan of treatment, the patient's general condition must be carefully looked into; the kidneys must be examined, as sclerosis may exist, without the detection of tube casts in the urine. Increased quantity of urine, of a low specific gravity, with or without albuminuria, indicates sclerosis of the kidney or pyelo nephritis, and therefore suggests caution as to prognosis and treatment. Arterial sclerosis is most serious, for such patients are not good subjects for treatment, whether medical or surgical. Inasmuch as prostatic hypertrophy, pure and simple, does not endanger life except through disorganization of the urinary apparatus, with proper management and care the prognosis may be considered favorable. Even with the palliative plan of treatment, by regular catheterization and cleansing the bladder at regular intervals, life may be comfortably prolonged for ten, fifteen or even twenty years.

The treatment of prostatic hypertrophy is palliative and

curative. In the effort to cure a large prostate, nothing short of a surgical operation for the purpose of removing the obstructing portion of the gland and securing restoration of the bladder function thereby, should ever be attempted.

The cardinal points to be considered in the palliative treatment are to combat the progressive deformity of the prostatic urethra; to encourage and promote a complete emptying of the bladder, and to combat septic processes in the urinary apparatus. Perhaps the very best means of combating the urethral deformity is the regular introduction of the metallic bougie. These should be gradually increased in size until normal size be reached, which should be introduced at intervals of ten or fifteen days for months, or perhaps years. Too much stress cannot be laid upon the importance of having the bougies absolutely aseptic and of using the gentlest manipulations in their introduction on these prostatics.

To successfully meet the second requirement, the bladder should be catheterized at regular intervals with perfectly clean instruments. The soft rubber, velvet-eyed catheter should always be used where it can be introduced. In some cases, however, it is impossible to introduce a soft instrument on account of the deformed urethra. In such cases the metal instrument with a long curve may be used instead. In using the metallic instruments no force whatever should be employed, as the degenerated membrane is easily torn and forms a ready focus for septic infection. Always warn the patient using the flexible catheter never to lose his hold on the instrument, as they are very prone to disappear in the urethra. To combat septic inflammation, it is only necessary to keep the bladder well washed out with hot water.

So long as the urine remains acid the water should contain boro-glyceride, one or two teaspoonsful to a quart, or perhaps what is better, two ounces of boro-lyptol to a quart. Nitrate of silver 1 to 500, or carbolic acid 1 to 300, may be used. After the urine becomes constantly alkaline, the very best wash for the bladder is bichloride of mercury in hot water 1 to 20000 or 30000. Belfield recommends iodine trichloride, and thinks it superior to mercuric bichloride. I have had no experience with it. In a degenerated bladder presenting diverticulae, its thorough emptying in washing out must be assisted by the position of the patient (knee-elbow), or by a siphon suction.

When the cystitis becomes extremely great, relief can

frequently be given by allowing a soft rubber catheter to remain in the bladder for a few days, thereby keeping up a continuous drainage. Belfield reports a case in which the patient became so delighted with the results of this continuous drainage that he wore the catheter in his bladder for two years, all the time doing his daily work. In case catheter drainage fails to relieve the cystitis, it may be promptly relieved by puncture of the bladder through the perineum or above the pubis with a good sized canula trocar. A soft rubber catheter is then introduced through the canula, the canula withdrawn and the catheter retained in position as long as desired. While there is little hope of improving the patient's condition by the administration of internal remedies, much can be done towards preventing fermentation in the urine. Among the remedies recommended for this purpose are boric acid, salol, saccharine, and many others. I think the best of all for this purpose is the benzoate of sodium. It should be remembered that old prostatics are very liable, after exposure to cold or dampness, damp or cold feet, unusual exertion, to one of two events. A sudden increase in the severity of his cystitis, or a complete retention of urine. It is frequently, on account of this absolute inability to urinate, that he becomes alarmed, and first calls a physician. In these cases we freqeuntly find the bladder enormously distended with urine, the ureters and pelvis of the kidney also damned up. It is in this condition that the physician needs to be most cautious. A bladder in this condition should never be completely emptied upon the first introduction of a catheter. About six to ten ounces of urine should be drawn, then one ounce of boro-lyptol injected into the bladder and the patient allowed to rest six or eight hours, and then a large quantity of urine, say twelve or fourteen ounces, are drawn, the antiseptic again injected, then six hours later the bladder may be entirely emptied and well washed out with a hot antiseptic solution.

In attempting the radical cure of prostatic hypertrophy the treatment is alone surgical. In other words, we must be expected to do a prostatectomy. This, in the majority of cases, is best done by the supra-pubic cut, as it is then done under the eye, but where it can be done through the perineal opening the drainage afterward is much better. The statistics in prostatectomy are not as favorable as we would desire, but this is mainly due to the fact that the operation is usually postponed, as a last resort, at which time the patient is in such a condition that he would with difficulty

stand an operation of any kind. When we have sufficient time the patient should be put on a diet, principally of sweet milk, for ten days or two weeks. He should drink during this time large quantities of pure water and eat some vegetables and fruits. Remedies should be given internally, as well as locally, to render the urinary passages antiseptic. Ether may then be given, and either the supra-pubic or perineal operation done. Inasmuch as the exact condition of the gland cannot be ascertained without an ocular or a manual examination, I should always advise a median perineal operation, and if after a thorough digital examination it is found impossible to remove the enlarged portion of the gland through the perineal wound, then make a suprapubic opening, and complete the operation. When we find a distinct middle lobe projecting into the bladder and attached by a medium-sized or small pedicle, it is best removed by electric cautery, wire snare or small ecraseur. If the middle portion of the gland is the chief portion of obstruction without being pedunculated or if the lateral portions are the offending parts, the very best means of removing is to freely divide the mucous membrane above and break down and gouge the friable gland with end of the finger. One of the chief dangers in prostatectomy is hemorrhage, and by the use of this method it is not apt to occur. The main object in performing a prostatectomy is to form a low level vesical opening, thereby enabling the bladder to empty itself without the aid of the catheter.

The operation of castration, urged by Dr. J. William White, is applicable to many cases, and far less dangerous than the removal of the prostate. It is as yet, however, being "weighed in the balances" by the genito-urinary surgeons of the world, and a verdict is not yet given. My own opinion is, however, that were it not for the tendency of a peculiar mania to follow it, it would be the operation "par excellence" in case of old men whose sexual functions are destroyed and who are suffering from the baneful effects of prostatic hypertophy. As stated before in this paper, many of our prostatics, perhaps a majority, when they come to have radical means instituted, are too weak to endure a serious operation. Their cystitis is severe, the catheter is introduced with difficulty and pain, and we must perform some operation for the relief of the urgent symptoms without expecting a cure. In other words, a palliative operation must be done. As a rule immediate relief is given by making an opening through the perineum and inserting a large drainage tube. The tube should be re-

tained from six to eight weeks, being removed and cleansed every third day, and the bladder washed with the antiseptics through the tube daily. The supra-pubic operation so strongly recommended and neatly performed by Dr. Hunter McGuire is also an excellent means of relief. Where it is necessary to retain a permanent fistula, it is to be preferred to the perineal opening. When our prostatics are educated to have a prostatectomy performed early, while the general health is good, and not wait until the constitution is broken down and one foot in the grave, the rate of mortality will decrease and the number of permanent cures will be greatly multiplied.

In conclusion let us briefly summarize:

1. Prostatic hypertrophy is a disease of old age, seldom giving trouble under forty-five years of age.

2. Prostatic hypertrophies are divided in two classes; those slightly enlarged with some residual urine, some interference with the force of the stream and recurrent attacks of cystitis; and those very much enlarged, with decided deformity of the urethra and inability to urinate voluntarily, the bladder only emptying itself by the aid of the catheter.

3. The first variety should keep up careful and systematic dilatation with metallic bougies and empty the bladder with catheter once daily.

The second class should at once be submitted to surgical treatment for radical cure.

4. A safe and efficient means of giving relief to urgent symptoms is by puncture through the perineum, which may be done without an anæsthetic or with cocaine.

5. In operating for radical cure pedunculated middle lobes should be removed by electric cautery, or ecraseur, not with scissors or knife. If not pedunculated the hypertrophied portion shall be gouged out with the finger after thoroughly incising the mucous membrane.

## CANCER OF THE BREAST.*

BY S. S. CROCKETT, M.D.,

It might not be unprofitable if a few moments of this meeting should be devoted to looking over the ground again and taking our bearings upon the common and too often

*Read at the Sixty-third annual session of the Tennessee State Medical Society, Chattanooga, April 14, 1896.

fatal malady of cancer of the breast. Bilroth states that twenty-five of every twenty-six tumors of the breast are malignant. This malignancy usually assumes the epithelial type, and, if left to pursue uninterruptedly its own clinical course, it can boast of a mortality of 100 per cent. It is usually not difficult of recognition, when it falls into the hands of the surgeon. The victims are usually elderly women who have borne children. The growth consists at first of one or more nodules, more or less hard, depending upon the rapidity of its development, more or less movable, with that part of the breast to which it is attached, causing little pain or inconvenience except anxiety. By and by it is noticed to be larger, and attaches itself to the skin, and, if the nipple is involved, it is retracted. Later the adjacent lymphatic tissues are noticed enlarged, the growth is less movable or has attached itself firmly to the muscles and, perchance, to the chest wall, or else the mass breaks down and the breast presents a ragged, sloughing, offensive ulcer. The wise surgeon, however, does not require the presence of this deplorable picture to reach a conclusion. However, a premature or hasty diagnosis may place the patient in an unfortunate frame of mind that in its results almost rivals the reality. For she will travel from office to office, in quest of reassurance, to ultimately fall into the hands of professional vampires, to be maltreated or robbed.

Referring briefly to some of its essential pathological characteristics, we know that the growth commences as one or more foci of atypical epithelial cells, supported by a fibrous stroma. We know that, as these cells multiply, they disregard that natural boundary set by nature to epithelial cells, the membrana propria, and push their way into tissue to which epithelial cells are strangers. The fibrous stroma is composed of the connective tissue normal to the part, which has been pushed aside and condensed by the rapid development of the atypical epithelial cells in its meshes. These atypical epithelial cells, which, for the want of a better name, are called cancer cells, have an inherent tendency to leave the original site of their development and fasten themselves to situations more or less remote when they multiply. These cells multiply by kariokinesis, just as normal cells multiply. This local infection of adjacent or distant organs by the cancer cells is accomplished by either the amoeboid movement of the cells themselves, according to Senn, or by the invasion and destruction of the vascular walls and their entry into the vascular channels.

This invasion and distraction of adjacent or distant tissues, by the abnormal proliferation of atypical cells, constitutes the essential factor in malignancy.

These cancer cells, as soon as they are attached to the normal histological elements, either far from or near to the original site, as they multiply, immediately establish new foci, from which infection proceeds, as from the parent growth. The local infection usually proceeds with the greatest rapidity in the direction of loose, connective tissue. In its destructive invasion, however, it manifests no anatomical predilections, but involves all organs and tissues, regardless of their anatomical structure.

The tissues involved seem to make no resistance to the parasiticism of their unwholesome guest, but remain passive while the cancer cells multiply to their destruction. The progressive enlargement of the tumor is due to new foci constantly developing in its periphery. Indeed, cancer cells have been discerned by the microscope proliferating in lymphatic spaces from one and one-half to two inches from the well-defined limit of the tumor in apparently healthy tissue.

The involvment of the adjacent lymphatics is one of the most characteristic phenomena of carcinoma, regardless of its situation, and this the route along which the infecting cells usually travel towards systemic infection. The migratory young epithelial cells find their way into the lymphatic tracts near the periphery of the tumor. Langhans, from injected specimens of the mammary gland, found the ducts and acini of the gland surrounded by a delicate plexus of lymphatic vessels, but was unable to trace them even to the membrana propria. Other authorities, however, claim that a direct communication between the ducts acini and the lymphatics does exist. The very free lymphatic supply to the mammary gland is well known. The cancer cells, having found their way into the lymphatic channels, either by migration or carcinomatous infiltration of the wall of the duct, is carried alone to the nearest lymphatic gland, where it is temporarily arrested, only to establish a new focus of development, which, in turn, sends other infecting cells along with the current to other neighboring glands. This process is repeated along the lymphatic chain from the breast to the axilla, from the axilla to the subclavicular and supra-clavicular glands, until the infecting cells ultimately reach the general circulation through the thoracic duct.

As soon as these cells have reached the blood current, they at once find lodgment in the various organs, liver, kidney, spleen, lung, etc., there to again repeat their propensity for development, the poor victim dying from exhaustion, from mechanical interference with the vital functions, from repeated hemorrhages due to erosion of vessels, or else from absorption of poisons elaborated at the seat of disease.

Now, when we know full well the tendency of this disease is to end in death of the patient, only after a period of suffering prolonged from six months to as many years, a very serious problem is presented to us when a victim applies to us for relief.

Now, we know, from the pathological sequences above described, that there is a period in its history when it is essentially a local disease. We know there is a period before the lymphatic glands are involved, but alas! too seldom seen. We know that, even after local infection and extension has commenced, that there is a period during which the infecting cells are temporarily arrested in their development and passage through the first neighboring chain of lymphatic glands. We further know that the legitimate paternity of cells obtains as forcibly in the development of tumors as in the reproduction of the normal tissue elements of the body.

We know that if every cell of a kind could be removed from the body, no more cells of that kind would be reproduced.

Normal and abnormal histological elements reproduce their own kind, and no other. We should never approach the question of relief for cancer of any organ without these well-established principles before us. If, by the procedure by which we propose to remove the cancer, one single, solitary cancer cell be left behind, the disease will surely proceed to its own fatal termination, with only an interruption in its progress. But, if we can succeed in removing every cancer cell, nothing is left behind to produce a recurrence.

If the operation is undertaken with the idea of hunting out every possible focus and removing every communicating lymphatic tract and gland in reach, whether apparently infected or not, we can offer the unfortunate victim, in a large per cent. of cases, reasonable assurance of a permanent cure.

In this way, and this way only, can we hope to remove every cancer cell. If every cancer cell is removed, there will be no more cancer.

Having as the object, then, of operative procedure the permanent cure of the patient, we are at once face to face with an undertaking that is much more hazardous to her than that usually performed.

Until quite recently, and, indeed, now, many surgeons undertake the operation impressed with the utter hopelessness of the victim; that, at best, only a prolongation of life, for a variable period, is expected. They are, therefore, opposed to elaborate operations, which are, in themselves,

hazardous, and are content to remove only the noticeable enlargement of the breast, leaving too often the enlarged lymphatic glands, the enlargement of which they attribute to sympathy. The result is a crime. It is quenching the fire in the cellar, but leaving it burning in the attic.

The first question to be answered in deciding what to do for a case of cancer of the breast is purely an anatomical one; namely, whether it is possible to remove all the local disease and the probable infected neighboring lymphatic areas thoroughly; otherwise it is unreasonable to hope for a permanent cure. Of course, if the question of permanent cure has to be put aside, because the whole infected area cannot be thoroughly removed, then we are driven to operate only for the promotion of temporary comfort.

Of course, if the infection has involved distant organs, or has reached the supra-clavicular lymphatic glands, or where there is a large mass in the axilla involving the nerves, any operation is out of the question. But, if we undertake the operation in what seems to be a favorable case, with the idea of permanent cure, we must bear in mind the real situation of the mammary gland.

Recent developments show lobules of the gland situated in the fat almost up to the clavicle and downwards on the aponeurosis of the abdominal muscles, inward almost to the middle of the sternum, and backward to the axillary line. Now, before we can be sure that all the cancer cells are removed, this entire breast, and its supporting fat, down to and including fascia covering the pectoral muscles from the clavicle above the sternum internally, and the border of the latisimus dorsi muscle behind, must be removed, and then the axillary space must be relieved of all its contents except nerves and blood vessels. It may become necessary in this procedure, in thoroughly searching out the apex of the axillary space, that the pectoral muscles should be divided. It may be necessary, owing to the adhesion of the lymphatic glands to the blood vessels, that either the vein or the artery, or both, should be ligated before all the glands can be removed. It may be necessary to remove infiltrated portions of the pectoral muscles from origin to their insertion.

The detaching of the skin covering this wide area will greatly facilitate the closing of the wound when it has been necessary to remove much of the skin with the primary growth.

With the former incomplete operation, many surgeons were so much dissatisfied, from the almost constant recurrence of the disease, that they advised against the operation

entirely. However, advancement has been gradually going on, as the more thorough operation has become popular, and the aseptic method introduced.

Trendelenberg had only four cures follow 100 operations. Bilroth had 9 per cent. of cures. Czerny had 8.5 per cent. of cures. Kuster had 15 per cent. of cures. Koenig had 20 per cent. of cures. Bergman had 30 per cent. of cures. To-day Halstead and Cheyne come forward in strong advocacy of the more thorough operation and offer as the result of their work 36 and 57 per cent. of cures respectively.

In estimating the efficiency of their work, these gentlemen have adopted the usual three years of immunity as representing a cure. Of course, while this rule is adopted in all statistics bearing on this disease, yet we must bear in mind it is only an approximate estimate of the real results, for some cases do recur after a period of ten years' immunity.

However gratifying this progress towards the relief of this dreadful malady may appear, yet it must be borne in mind that satisfactory results can only be obtained when patients and doctors alike awake to the understanding that there is a good chance of permanent cure only from a very early and thorough operation.

And, further, that a suspicious lump in the breast of especially an elderly woman is a thing not to be watched, but to be at once and thoroughly removed, for 90 per cent. of the swellings in the breasts of elderly women are cancerous.

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## THE RADICAL OPERATION FOR CANCER OF THE BREAST.*

BY H. J. WARMUTH, M.D., SMYRNA, TENN.

It is a well-known fact that excision of the mammary gland for malignant tumors is a very unsatisfactory operation, not so much on account of the technique, which is simple, but on account of a recurrence of the growth in 95 per cent. of all cases treated under the old plan.

Amputation of the breast is a useless and unjustifiable procedure; the unavoidable manipulation of the tumor during the removal of the breast, under the ordinary method,

*Read at the Sixty-third Annual Session of the Tennessee State Medical Society, April 14, 1896.

is responsible for the entrance of cancerous matter into the healthy tissues of a fresh wound, thus favoring a recurrence locally or a metastasis upon the internal organs.

In order to diminish mortality, to prevent a recurrence as much as possible, and to increase the rate of recoveries, Kuster, Halstead, Myer, Bull and other surgeons have recommended the extirpation of the breast with the pectoralis major muscle, and also the pectoralis minor, if necessary, with a thorough ablation of all the contents of the axilla, saving only vessels and nerves. This is called the radical or complete operation. Under this method, Bull claims 26 per cent. of recoveries, while Halstead, of Johns Hopkins Hospital, publishes a report of 100 cases, with 97 recoveries and only 3 recurrences, and the patients were under the doctor's observation from six to eight years.

One year ago I was consulted by a colored woman, age 55 years, married, the mother of several children, for a painful tumor in her breast. The patient was emaciated and complained of lancinating pains, especially at night, which deprived her of her accustomed rest. The tumor was of one year's duration, and had been preceded by an eczematous rash. Upon examination, I found retraction of the nipple, and above it a hard tumor the size of a small orange, while upon the top of the same the skin was broken, emitting a foul-smelling discharge. The subaxillary glands were very much enlarged and indurated. My diagnosis was carcinoma of the breast, which subsequently was verified by other physicians. After two weeks of preparatory treatment, I operated upon the patient in the presence of Drs. Crosthwait, Gracey and Hibbit. The long incision was made with one sweep of the knife, and well carried up on the arm, as far as the lower border of the teres major tendon. By means of nothing but the fingers, in order to avoid a division of the cancerous tissue, all corrective tissue was dissected down in one single layer, and, with a few sweeps of the knife, the whole mass was detached from its connections. The pectoralis minor looked healthy and was not disturbed. The axillary fat and all glands within reach were then removed; the latter were of the size of large marbles.

This operation lasted nearly two hours, on account of suspended respiration from chloroform. Four times operative procedure was interrupted, but, thanks to the efforts of Dr. Gracey, who administered the anaesthetic, and the other gentlemen present, the patient bridged over impending death, and the operation was brought to an end. One week after the patient was able to walk about in the yard, and in

a few weeks more the patient was well. I examined her a few days ago, and found her in the enjoyment of good health. She had good use of her arm, the cicatrix is soft, and there is no point of induration, and, while the woman has not yet passed the three years' limit, I am still hopeful of her recovery.

This operation is not easy; it is surrounded by many difficulties; it is a major operation, but the only one that holds out any reasonable prospect of success; it is attended with little more risk than the ordinary method, and the mortality ought not to exceed 2 or 3 per cent., but in no case should operative treatment be delayed.

# Selections.

PROTONUCLEIN A METABOLIC FORCE.—I have used it in more than twenty different cases with absolute satisfaction. Will briefly mention a few cases giving its clinical behavior. The first two cases were typhoid fever, same family, same environments, sick about a week when first seen by me; cases almost identical; temperature when first seen ranged 103½. I placed them at once on small doses of calomel and soda, antifebrine in three-grain doses every one, two and three hours as required to control the fever, with three grains of quinine sulph. every four hours. In addition to this I placed one patient on Protonuclein, three grains every three hours; the temperature of the one placed on Protonuclein never ranged higher than 104, and on the fourteenth and fifteenth days the temperature was 98 to 99, with marked symptoms of convalescence. The other's temperature gradually increased, ranging from 105 to 105½—one time 106, at the sixteenth day, when I gave in addition to the treatment Protonuclein. In a day and a half to two days, temperature began to gradually decline with a general amelioration of all symptoms, and on the twenty-first and twenty-second days there was little or no fever. Both cases resulted in satisfactory recovery.

There next came under observation three cases of malarial fever, from Ft. Smith, Ark. A mother of twenty-seven years, and two children—one of four years, the other, two years and

eleven months. Mother taken sick in Ft. Smith and came here (her old home). She had been sick about ten days, and her physician there thought that Springfield, being her native home, would be beneficial to her, as there was an epidemic of malarial fever raging at Ft. Smith at that time. When first seen by me her temperature was 102½ to 103. As the physician that had been treating her had prepared sufficient medicine, which she had brought with her, I recommended that she continue his line of treatment. But I prescribed for the children, who were suffering from the same malady; one of four years had a temperature of 104; one of two years and eleven months had a temperature of 105. To each I gave Hydrag. Sub Mur. and Soda Bicarb., and placed them on Protonuclein; the older, two grains every three hours, the younger, one and a half grains every three hours, with a local application of Quinine Alk. in Ol. acid, three grains every three hours. The younger had no fever after the third day, appetite good, sleeping and doing well; the older improved more slowly, but had no fever the fifth day, after which rapidly convalesced. All the while the mother was having fever 101½ to 102, complete anorexia, nervousness and insomnia. As her medicine which she brought with her was about exhausted, I placed her on Protonuclein Tablets, one every three hours. Her fever in less than a day began to decline, and was absent on the second day, appetite improved, nerve tension reduced, and she made a rapid recovery.

Have used Protonuclein in three cases of pelvic trouble; first, a lady of twenty-three years, suffering with salpingitis with local peritonitis. I had attended her in previous attacks that required from two and a half to three weeks to recover. The last attack, which was equally as grave, if not more so, than the prior attacks, I treated her with Protonuclein, three grains every three hours, and was able to arrest the trouble in eight days.

Second case.—Septicæmia, arising from retained secundines following an abortion. When first seen was having recurrent chills, fever, nausea and vomiting, skin sallow, eyes yellow. I placed her on Hydrag. Sub Mur. and Soda Bicarb., Quinine Sulph., Sulph. and Phos. Soda. Hot water injections to remove debris from the uterus. The case gradually grew worse for twelve days, when I gave in addition Protonuclein every three

hours, after which her chills ceased and she gradually recovered, on no other treatment than Protonuclein.

Third case.—Acute Endometritis following childbirth. Protonuclein locally every day, and a tablet internally every three hours; satisfactory recovery in eight days.

Deep erysipelas and cellulitis in a man of thirty-eight years, following an injury to the face and neck on the left side; formation of pus in the deep cervical cellular tissue; temperature of 105, delirium, nausea and vomiting. Under the ordinary treatment of Iron, Strychnia, Digitalis and Quinine the patient grew worse. I then placed him on Protonuclein, three grains every three hours, day and night, also hypodermic injections; there was marked improvement at once, with a gradual recovery, while we had expected a fatal termination of the case. I have used Protonuclein in the treatment of abscesses with good success; in acute bronchitis, and in colds, I consider it excellent. Have used it in two cases of uncomplicated diphtheria, with recovery in six to eight days in both cases. Have used the powder in cases of long standing ulcers with good results, also on extensive burns. The powder excites a new formation of epithelium, and takes the place of skingrafting, as in a case I have recently treated—a burn ten or eleven inches wide and fourteen to sixteen inches long on the back; there was the formation of a new covering in four weeks, and the patient doing well otherwise. —*J. E. Warden in Medical Mirror.*

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Lithia a Valuable Remedy.—Lithia is at present one of the foremost remedies for rheumatism, kidney troubles, gout and analogous diseases. Many of the various Lithia waters on the market are, as a rule, unreliable, the chief complaint being the varying amount of lithia contained in the water. For instance, some time ago I had a case where lithia was indicated. I tried a well-known lithia water, and was extremely disappointed in the results. I mentioned the incident to my druggist, who is a thoroughly "up-to-date" man, and he informed me that the latest and most accurate mode of administering lithia was in three and five grain tablets. I purchased some of Wm. R. Warner & Co's., original lithia water tablets, three grains, administering them to

a patient, and the result was so gratifying that I have used them ever since. I have yet to be disappointed in the results of their administration. One case was that of a man forty-five years of age who had been troubled with kidney trouble for six years. He had been taking a natural lithia water and had not been benefited at all. He finally came to me, and I prescribed lithia in the only intelligent method that is possible—in tablet form. Why? For the reason that I know how much lithia I am giving my patient. One might give a patient a gallon of natural lithia water, and if asked how much lithia he has administered would find it impossible to state the exact amount. This patient fully recovered under this treatment.

Another case that occurs very vividly to my memory is that of an aged lady who had been troubled with rheumatism in both arms for a long period. She could, with difficulty and much pain, use her right arm. The left one was completely useless. Although it required constant attention and administration of lithia (tablet form), still the treatment at last affected a radical cure. I thought it my duty to call the attention of the profession to the lithia tablet, and to recommend it in preference every time to the natural lithia water.—*Monthly Retrospect of Medicine and Pharmacy.*

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THE TREATMENT OF ULCER OF THE STOMACH.—In the *Progres Medical* for March 7th Dr. Paul Cornet says that the treatment to be carried out in this affection varies according to the presence or absence of hemorrhage. In the first condition absolute rest and immobilization of the stomach are indicated. There should be complete abstinence as regards food, not even ice being allowed, as it is more injurious in its effects than useful. Occasionally a blister or compresses of ice over the epigastrium give good results. If the hæmorrhage persists, a syringeful of the following solution may be injected into the region of the stomach:

| | | |
|---|---|---|
| Dialyzed extract of ergot | 30 | parts; |
| Distilled water | 150 | " |
| Carbolic acid | 3 | " |

No nourishment should be given, although if the patient is weak and the circumstances present some danger, alimentary

enemata, such as the following, should be resorted to exclusively:

| | |
|---|---|
| Milk | 8 ounces; |
| Salt | 1 teaspoonful; |
| Red wine, | |
| Starch, each | 1 dessertspoonful. |
| The yolks of two eggs. | |

This is to be heated until it is lukewarm and slowly injected from two to three times a day after an enema of water. Pain should be combated with narcotics, such as codeine hydrochloride or codeine phosphate, in doses of from half to three quarters of a grain. If the constipation requires treatment, enemata composed of warm water and soap, glycerin, and olive or castor oil may be administered. For from four to seven days after the hemorrhage has occurred the patient must remain in bed on his back, and warm liquid food may be given, such as milk and limewater, or milk with a little tea and coffee, beef tea, bouillon, Koch's peptones, Leube's meat solution, emulsions made from the whites or the yolks of eggs, and the waters of Vichy, Vals, Krondorf, Lachingen, etc. Cocoa, chocolate, and wine should be avoided.

In the second week after the hæmorrhage the treatment may consist in the following: Night and morning the patient should take Carlsbad water with seventy-five or one hundred and fifty grains of artificial or natural Carlsbad salts. Compresses hot enough to redden the skin should be employed constantly. The preceding diet is continued, with nutritive enemata in case of great weakness.

During the third and fourth weeks the patient may be placed on a sofa and allowed to move a little. The use of the Carlsbad water is to be continued for at least six weeks. The diet, in which milk still continues to be the principal article, may include biscuits, cakes, roast veal, meatpie, fish, shellfish, a little weak wine, and acid drinks. After the fourth week the following may be added: Boiled potatoes, spinach, carrots, peas, beets, and red meats well cooked. For a year or more, raw or iced fruits, highly spiced food, and very hot or cold drinks should be avoided.

Concerning the treatment in cases where there is no hæmorrhage, the author calls attention to the following methods:

1. According to Anderson and Donkin, for two or three

weeks the patient is nourished exclusively by the rectum. It is only in cases of extreme thirst that small pieces of ice, Seltzer water, or acid drinks may be allowed. Ten days later, milk, tea, bouillon, and red wine may be carefully given by the mouth. Hot compresses should be used over the epigastrium.

2. In light cases, and even in certain dangerous ones, good results may be obtained from the systematic use of silver nitrate. In the beginning a solution of four grains of the nitrate in five ounces of water may be employed in doses of a dessertspoonful three times a day. The strength of the solution is afterward increased to five and then to six grains. A proper diet is combined with this treatment. Very frequently a diarrhœa is observed with this treatment, but it is not intense and disappears with the continuation of the treatment.

3. Pleiner recommends the bismuth treatment. According to him, the carbonate is preferable to the subnitrate. He prescribes from 150 to 300 grains of bismuth subnitrate suspended in six ounces of warm water, which is to be introduced into the stomach through a tube after previous lavage. This solution is at first introduced every day, then every two days, etc., until the inflammatory condition disappears. The indications for this treatment are, according to Pleiner: 1. In ulcer, ulcerous, cancer, and hæmorrhagic erosions. 2. As a specific agent in gastric and duodenal ulcers. It is contraindicated in affections of the stomach where there is very little secretion.

4. According to Leubuscher, Schäfer, and Hitzig, morphine is always a prompt and sure agent, and at the same time it diminishes considerably the gastric over-secretion. Boas, however, gives the preference to codeine, particularly the hydrochloride and the phosphate. He prescribes the following formulas:

1. Codeine,
   Extract of belladonna, each..... 6 grains;
   Bismuth carbonate..... 45 "
   Sugar of milk..... 60 "

Divide into ten capsules, of which from one to three a day are to be given.

2. Codeine phosphate..... 15 grains;
   Extract of gentian..... q. s.

Make thirty pills, of which from one to three may be taken daily.—*New York Medical Journal.*

RECTAL ALIMENTATION.—The following prescriptions are given by the *Journal des Praticiens* of March 14, 1896:

As a nutritive enema:

℞ Cod-liver oil, 5 ounces;
Yolk of one egg;
Lime-water, 10 ounces.

This mixture is sufficient for four or five enemata, which may be given during the course of a day. In other instances the following may be employed:

℞ Cod-liver oil, 5 ounces;
Yolk of one egg;
Chloride of sodium, 40 grains;
Water, 10 ounces.

This is also sufficient for four or five separate enemata.

In still other cases, where it is desirable to use the hypophosphites, and the stomach will not retain them, the following rectal injection may be employed:

℞ Cod-liver oil, 1 pint;
Gum tragacanth, 35 grains;
Gum arabic, 1½ ounces;
Hypophosphite of lime, 35 grains;
Lime-water, a sufficient quantity to make 1 quart.

From four to six ounces of this liquid may be used as an injection.

For dysentery:

℞ Sulphate of quinine, 10 grains;
Powdered ipecac root, 5 grains;
Chloride of ammonium, 10 grains;
Tincture of opium, 12 drops;
Distilled water, 1 ounce.

Of this a small teaspoonful may be taken every four hours. —*Therapeutic Gazette.*

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CHRONIC GASTRITIS OF LONG STANDING, WITH PERIODIC ATTACKS OF MIGRAINE.—The herewith reported case is one of double interest, inasmuch as the patient has been under my care for a number of years, and previous to the commencement of the present treatment, I have been unsuccessful in affording

much relief or preventing the recurrence of the frequent attacks of migraine, to which she had been more or less subject to since early womanhood. The cause of which I could not account for than a "habit long continued," aggravated by gastric catarrh.

The history of the case is briefly as follows. Mrs. A., age 55, since early womanhood has been subject to periodic attacks of migraine at intervals of two, three, or four weeks, but seldom free from them for longer intervals.

An attack comes on by general malaise of usually a day's duration, repugnance of food or drink, marked drowsiness, much depression with request for rest and quiet, followed by complete physical prostration, dull frontal headache, which the least noise or disturbance makes the more intense, invariably accompanied by violent and frequent attacks of vomiting and retching, inability to retain any food or nourishment of any kind, retention of bowels, often cold sweats, pulse somewhat slow and weak, and small in volume. This condition lasting usually two days, followed by gradual cessation of symptoms.

During the whole period of usually four or five day's duration, she is unable to take nourishment of any kind, remains constantly in bed, and desires only complete rest and quiet. The previous treatment has been so varied and on so many different plans, that I refrain from mentioning them.

Two years ago I was able to prevent an attack for over two months by the use of strychnine in 1-20 grain doses t. i. d. with careful diet and artificial digestive.

In May, 1895, I put her on Charles Marchand's "glycozone" in teaspoonful doses well diluted t. i. d., using this as all other previous remedies experimentally; she commenced to improve much in general health, an unusually good appetite, without the previous distressing symptoms following, a more regular movement of the bowels, freedom from headache, and in every way a decided improvement, this improvement and enjoyment of good health lasted during continuation of above treatment for over three months. Unknown to me she stopped taking the glycozone, thinking herself perfectly well. In a few weeks had a return attack, milder and devoid of gastric distress. A similar attack two months later, both of which occurred some weeks after stopping the above described treatment, and I might say caused by imprudence in diet.

The conclusion come to in this case, is that the headache is sympathetic, that the stomach becomes acutely inflamed by its inability to naturally and properly perform its functions, and responds to the call of nature to unload itself, and thus secure for a time rest, that the use of glycozone has corrected the existing gastritis, and by so doing has removed the primary cause of these many years of suffering.—*Geo. A. Curriden, M.D., in Medical Summary.*

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STATE SUPPRESSION OF INEBRIETY AND CURE OF INEBRIATES.—Dr. Orpheus Everts, Superintendent of the Cincinnati Sanitarium, the well-known Private Hospital for the Insane, and others suffering from disease of the brain and nerves, read a paper before the Section of State Medicine at the Atlanta meeting of the American Medical Association.

The doctor, who is a veteran of the profession, exhibited good taste, as well as skill of condensation, by limiting his discourse to less than fifteen minutes, and yet saying all that was profitable to be said on the subject treated, under existing circumstances. His subject was: "State Suppression of Inebriety and Cure of Inebriates."

The ground was taken that all efforts for the suppression of inebriety and cure of inebriates, notwithstanding the good that may have been done, have, so far, fallen short of accomplishing the desired end. This he accounted for by the fact, as claimed, that inebriety is a disease, resulting from the interaction of alcoholic poison upon defective, or unstable, neurotic, organizations, that is not, as a rule, amenable to social or moral influences, or medication of any kind; not supplemented by environmental restraint, and that such necessary restraint can be successfully applied in the treatment of inebriates, only by the State. That the State should be interested in the treatment of inebriates follows from the fact that they belong to a defective class of society, correlatable, constitutionally, with the insane, epileptic, and other neurotic persons, so impaired by disease not amenable to ordinary treatment, as to be incapable of good citizenship, and dangerous to themselves and others.

The doctor said that after many years of observation and ex-

perience in the treatment of inebriates, he thought there were two methods by which inebriety could be suppressed, and inebriates cured more successfully than by the methods already tried and found wanting. One of these methods implied absolute prohibition of the manufacture or sale of intoxicants; the other an inhibition of the inebriates procurement and ingestion of them by State authority.

Of these methods he regarded the first as so nearly impracticable, considering human nature as it is, and our political institutions as they are, as to be out of the question; while the alternative of placing inebriates under such (bearable) restraint as would ensure continued abstinence from intoxicants (the only curative process) he believed to be practicable, and free from the objectionable features of "prohibition."

To this end Doctor Everts recommended—not "asylums," "homes," or "retreats" for inebriates, recruiting stations, as usually administered, without authority to needfully restrain, and employ, where drunkards recuperate sufficiently to go out and enjoy another period of debauchery—but colonies, where all the inebriates of a given district may, voluntarily, or unvoluntarily, be domiciled, and furnished by State authority and under State administration, with not only hospital accommodation, but with varied occupations, enabling them to earn their living, if not something more, with certain regulations for parole and return to colonial life, under well defined circumstances. The paper was well received.—*Charlotte Medical Journal.*

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Reduction of Dislocations of the Shoulder.—Dr. J. M. Weed, in the *Medical Record* of January 11, 1896, claims to have discovered a new method of reducing dislocations of the humerus of every form. The article, which is illustrated, is reproduced in full:

"Every physician and surgeon is aware of the usual manipulations for reducing this dislocation. The books figure the heel in the axilla and extension, the knee in the axilla, and some substitute a ball of yarn. Then there is the method by adduction, rotation outward, carrying the elbow on to the chest and the hand on the sound shoulder. All of them are painful and often

fail, so that it is by repeated effort that success is gained. And finally there are the pulleys that look like a relic of the Inquisition. Forty years ago I adopted a new method that I have never seen described. A boy in the year 1856 was thrown from a horse and suffered a dislocation of the humerus. I laid him on the floor, carried his arm up by the side of his head, held the scapula down with one hand, and pushed the head of the humerus into its place, which was easily done, and with little pain. The movement of the arm completely surprised the muscles of the shoulder so that there was no contraction, and it lifted the head of the bone from its new locality. With that accomplished the reduction follows with hardly any of the audible snap that attends the common method. After reduction the arm is brought down to the side, and the head of the bone supported till the arm is at rest. I have treated every dislocation of the shoulder in the same way since that time. Persons standing around always remark as to how readily the reduction is effected. After carrying the arm up by the side of the head I sometimes give the hand to an assistant, then fix the scapula and draw it down with one hand, and elevate the head of the humerus with the other; chloroform is never needed."—*Amer. Med. Review.*

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Acute Vaginal Gonorrhea.—H. C. Bloom, in the *Philadelphia Polyclinic* of January 25, 1896, advocates prompt and energetic treatment in this disease, to prevent future pelvic involvement. He advises immediate washings of the vagina and contiguous parts with solution of hydrogen dioxide, which seems to be the one agent that searches every fold and crevice, cleansing and putting them in condition for the next step, which consists in the thorough application of silver nitrate in solution (sixty grains to the ounce) over the entire surface. This is at once followed by the careful packing of the vagina with powdered boric acid, and the placing of a small soft wool tampon. The patient is requested to return in twenty-four hours, when the tampon and packing are carefully taken out, with probably a cast or exfoliation of the destroyed or infected tissue—if not as a whole, then in large flakes and sufficiently deep to destroy the gonococcus in the papillary layer of the mucosa, This practically cures the

gonorrhea. A simple wound remains, and the next step is to wash this raw surface with a solution of mercuric chloride, 1:4000, following this by loosely packing the vagina with moist iodoform gauze, which is allowed to remain seventy-two hours. Upon its removal the surface will present a clean, healed appearance.—*Therapeutic Gazette.*

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

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FOR SCIATICA.—Troussevitch has relieved cases of sciatica which had resisted all kinds of internal and external treatment, in a few days, by the administration of nitro-glycerin in the form of "drops," as follows:

℞. Alcoholic solution of nitro-glycerin, 1 per cent, ½ drachm.
Tincture of capsicum, 1½ drachms.
Peppermint-water, 3 drachms.

Five drops thrice daily in a tablespoonful of water for the first three days, and ten drops thrice daily on the following days. —*The Practitioner.*

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# Editorial.

## OUR CENTENNIAL.

In the earlier issues of this JOURNAL of the current year we had the pleasure of calling the attention of our many readers to the Tennessee Centennial Exposition. Other matters subsequently have demanded editorial notice, and, although we have permitted a lapse of attention, it was but temporary; and we can assure those at a distance who have any inter-

est in the matter that managers and officials who have the matter in charge have been most active and energetic, as a very brief visit to the Centennial grounds will show.

With the Administration Building, the Auditorium, the Woman's Building, and the vast Machinery Hall, now completed; with the Parthenon or Liberal Arts Building, the Transportation and the Commerce Buildings nearly completed; with the Agricultural Building and the Children's Building now under contract and in process of erection; the thorough grading and beautifying the grounds, and other buildings under design, with the liberal contributions already made, and which are being added to most liberally every day by our citizens, regardless of National or State aid, which is yet to be obtained, or the various State, County or order enterprises that will rapidly evolve into shape during the ensuing ten months, a most satisfactory, interesting and instructive exhibit next year is well assured.

While demonstrations as magnificent have transpired in other places at other times, the enthusiasm evinced by the people of Tennessee at Nashville, June 1st and 2nd, during the celebration of the State's Centennial and the formal inauguration of the Tennessee Centennial Exposition, displayed a spirit of earnestness and unanimity that is rarely witnessed and will never be forgotten. Thousands of visitors from a distance thronged the public places, and the whole population of the city seemed to have poured itself into the streets.

The procession of Monday was one long to be remembered. The U. S. troops of Calvary and Infantry, the State Militia, Infantry and Artillery, the Confederate Veterans, Infantry and Cavalry, the immense concourse of ladies in carriages and on floats, the citizens in carriages, on horseback and on foot, embracing State, County and municipal authorities, professional men, merchants, mechanics, benevolent orders, trade-unions, etc., embracing the very best and most representative of our citizens, both white and colored, and the two whole days given up as "general holidays" for the purpose of "inaugurating" this grand monument form a most favorable and impressive omen of what may be expected next year.

The following extract from one of the Centennial editions of the *Nashville American* will be interesting to many of our readers, and is a concise setting forth of the "raison d'etre," so far as the Centennial is concerned:

"The purpose of Tennessee in holding an exposition is to celebrate the hundred years of history and valor of her sons and to show the world her wonderful resources. The romance connected with the State has been too little known or appreciated till the late past, and it is with the view of making this history known to her own children as well as to others that the enterprise was first inaugurated. There is in the list of States no other which can show such a record as Tennessee. The formation of the State out of a portion of North Carolina is about as far as the knowledge of a great many Tennesseans goes. As a matter of fact the State formed

itself, and knocking at the door of the Union demanded admittance as a right instead of asking it as a courtesy. The cession of the portion of the State to the Government, now known as Tennessee, was made willingly by North Carolina, and it was erected by Congress into "The Territory South of the River Ohio." This was in 1790.

Long before this, in 1772, the settlers at Watauga had asserted the right of self-government, and had drawn up the first written compact for civil rule ever written in this country. Not only was it the first instance of asserting and maintaining self-government, but three years later, at Mecklenburg, in North Carolina, and Tennessee being a part of North Carolina, is entitled to a share in its history, the first formal declaration of independence was made. In the gloomiest hours of the Revolution, the hardy pioneers, under Sevier, Shelby and Campbell, won the battle of King's Mountain and turned the tide of victory for the struggling colonies. From the achievement of this glorious victory in 1780 to the consummation of independence at Yorktown next year there was never again thought of failure or compromise.

Tennessee was the sixteenth State, and the first erected out of original territory, both Vermont and Kentucky being formed of a portion of other States and never being territories of the United States. Tennessee was born into the Union full grown. The people of the "Territory South of the River Ohio" did not ask Congress for leave to have a constitutional convention and to form themselves into a State. They took a census of themselves, and finding that they had some 65,000, determined that they were grown large enough to be a State, and that, therefore they were entitled to be one of right. They therefore elected delegates to a convention at Knoxville, empowered them to organize a State Government for them. Andrew Jackson was a delegate member of the convention, and this was not the only time that he was willing to "take the responsibility." This convention made a constitution which Thomas Jefferson said was the best one that had been anywhere made up to that date. It lasted till 1834. The coolness of the whole proceeding, as set forth in the preamble to their constitution, is very refreshing. This is what these backwood's statesmen said, or wrote: "We, the people of the territory of the United States south of the River Ohio, having the right of admission into the General Government as a member thereof, * * * * do ordain and establish the following Constitution, or form of government, and do mutually agree with each other to form ourselves into a free and independent State by the name of Tennessee."

The convention completed its labors, and under the Constitution an election was held which resulted in the choice of John Sevier as Governor and a full Legislature. The Legislature elected Senators and a Representative and sent them to Philadelphia to demand admission as a State. There was bitter opposition to the admission of Tennessee under these circumstances, but the State won, though the Legislature was forced to elect new Senators and Representatives, which they did by re-electing those previously sent.

And there are those that do say that this is where the State of Tennessee first got the title of the Volunteer State.

The record of the State is too long and full of honor to be given in this article. But it is to celebrate this eventful history and for other reasons that the Exposition is to be held."

It will not be a purely State Exposition, but State, interstate and international. The strong features of the Exposition proper will be from every part of the world. Tennessee will endeavor, however, to properly show her resources and illustrate her history. That history, as indicated above, is a story that cannot be surpassed by the history of any State in the Union. There will be, therefore, a building for the illustration of Tennessee History alone in which to make display of the priceless collection of relics gathered by the Tennessee Historical Society during its long and busy existence. To the relics belonging to the society will be added almost innumerable relics of the greatest historical value loaned by citizens of the State, and contributed by the various patriotic societies.

But the historical feature is only a single one of the features. The people of the State themselves have been slow to appreciate the enormous advantages which nature has bestowed upon them, and though Tennessee's resources are the richest of those of any State in the Union, they have been only in a slight degree known to the world. Every commercial mineral in the world is found in her borders. More kinds of hardwood timber are cut in Tennessee than in any other State, and in many cases the timber is cut from the above the richest minerals concealed in the earth beneath. An example of mineral wealth is the recent discovery of phosphates of this State, which are pronounced the richest known in the world. The fame of Tennessee iron is world-wide. As to agriculture, there is never a year that the people of the State fail to raise enough to take care of themselves till the next crop can be raised. There are never any total failures in Tennessee crops. Within the borders of the State can be raised profitably everything in the vegetable line except tea, coffee and the spices. It has been truly said that a wall could be built around the State and the people have everything necessary to their health and comfort. To show these varied resources, which are but faintly outlined above, is one more reason why the Exposition is proposed.

The Exposition has been divided into sixteen departments, each with a chief and a large working committee. The Chiefs of Departments are as follows:

Fine Arts, Architecture, Indian Relics and History—Theo. Cooley.

Agriculture, Horticulture and Agricultural Implements—Maj. T. F. P. Allison.

Live Stock, Poultry and Domestic Animals—V. L. Kirkman.

Transportation—John W. Thomas, Jr.

Machinery—W. T. Magruder.

Military—Charles Sykes.

Education—Dr. W. L. Dudley.

Geology, Minerals and Mines—Dr. J. M. Safford.
Medical and Surgical Appliances—Dr. J. D. Plunket.
Children's Department—Prof. W. T. Davis.
Bureau of Promotion and Publicity—Leland Rankin.
Negro Department—J. C. Napier.
Woman's Department—Mrs. Van L. Kirkman.
Forestry and Forest Products—A. E. Baird.
Electricity—Edward F. Seixas.
Commerce, Manufactures and Liberal Arts—H. W. Buttorff.

While all of the Departments and Committees are well organized and are taken from the most representative citizens of the State, noted for their energy and progress in the various departments to which they are attached, space does not permit us to give them in full. The Department of Medical and Surgical Appliances, with Dr. Jas. D. Plunket as Chief, is of most interest to our readers and is as follows:

Section A—Hygiene and Sanitary Appliance: W. M. L. Coplin, M. D., Chairman; Harry Marr, M.D., (bacteriology); Jule G. Zwicker, (sanitary architect); P. D. Simms, M.D., Chattanooga; W. C. Rayen, D.V.S., (veterinary); F. A. Dortch, B. A. (sanitary chemist); G. B. Thornton, M. D., Memphis: John W. Ross, M. D., Clarksville; T. J. Mooney, (plumbing.)

Section B—Medical History (Tennessee especially), Literature, Books, Journals, Pamphlets, Statistics, etc.: John H. Callender, M.D., Chairman; G. H. Savage, M.D., Deering J. Roberts, M.D., S. S. Crockett, M.D.

Section C—Surgical and Medical Instruments, Appliances, Dressings, etc.: Charles S. Briggs, M.D., Chairman; Lee Cantrell, Secretary; Theodore Tafel, Hugh R. Miller, M.D.

Section D—Drugs, Pharmacy, Pharmacology and Dietetics Intended for the Sick: J. Criddle Wharton, Phar.D., Chairman; E. M. Neal, R. H. Gordon, S. O. Barnes.

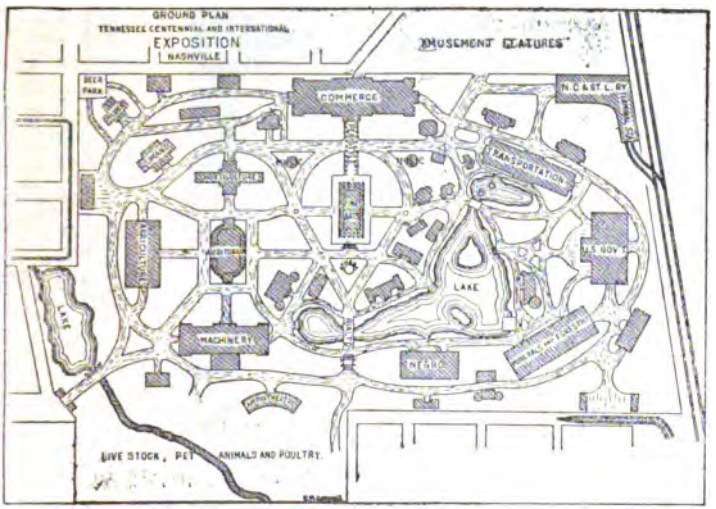
Section E—Dental Apparatus, Instruments and Prosthesis: J. Y. Crawford, M.D., D.D.S., Chairman; J. David Herblin, Secretary; Henry W. Morgan, M.D., D.D.S., J. P. Gray, M.D., D.D.S., Gordon White, D.D.S., W. H. P. Jones, D.D.S., D. B. Blakemore, D.D.S., R. R. Freeman, M.D., D.D.S.

Section F—Hospitals, Vehicles and Appliances for Transporting Sick and Wounded: John R. Buist, M.D., Chairman; W. H. Witt, M.D., John Bass, M.D.

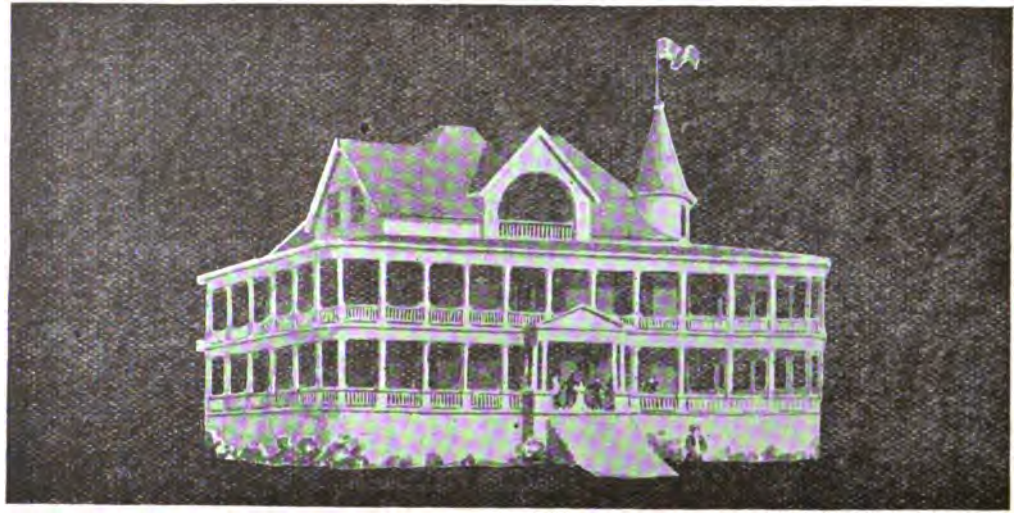
Section G—Physical Development and Condition: James T. Gwathmey, M.D., Chairman; John L. Jordan, (Athletic Clubs and Turnveriens), Secretary; Ellery C. Huntington, (Schools and Colleges); A. W. Barnard, (Y. M. C. A. work).

The Exposition grounds comprise a park of some two hundred acres, lying two miles west of the State Capitol, and approached by three lines of electric cars and a steam railway. Over $100,000 have been expended on the improvement of the property in the past few years, and from its

elevated plane a fine view of Nashville is afforded. The central portion of the site has been regraded at a large expense and prepared for the edifices of the Exposition. An elaborate system of walks has been laid off and macadamized, and the finishing construction will be of asphalt. Thousands of roses and evergreens have been set out, and the recently graded places have been sodded or sown with blue grass. Two lakes of pure water and many fine shade trees add the final touch of beauty to the energetic scene of construction.




The management is using every endeavor to bring together the most unique and attractive things procurable, and the best exhibits in each class are solicited. No charge will be made for a reasonable amount of space for exhibits in any of the buildings, but each exhibit offered will be subject, for acceptance or rejection, to the Committee on Classification, with the approval of the Director General, composed of the heads of departments. In order that the exhibit may be in place on the opening day, the exhibitor will be required to make a deposit in cash with the management when the exhibit is accepted. An agreement will then be entered into, under which the management promises to have its buildings ready January 1, 1897, and the exhibitor agrees to forfeit the deposit if the exhibit is not in place and ready for inspection May 1, 1897. The deposits will be held as a sacred fund and returned, in cash, to exhibitors whose exhibits are complete on the opening day. All questions of delay in getting exhibits in place, arising from unavoidable causes, will be decided by the Committee on Classification, presided over by the Director General. Exhibit and concession application blanks will be furnished on request, by the Director General, E. C. Lewis, Nashville, Tenn.

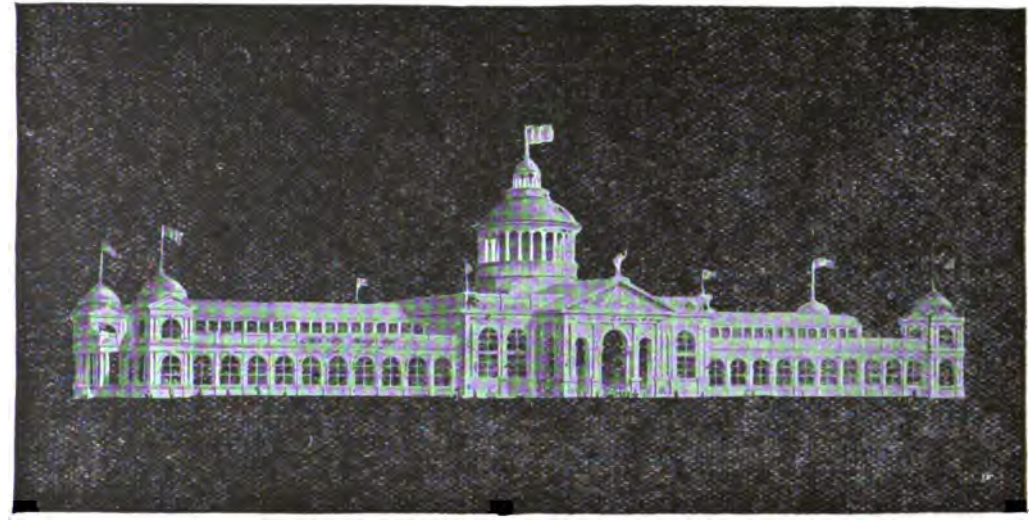


THE ADMINISTRATION BUILDING.

The first edifice completed on the grounds of the Exposition was the Administration Building, where the offices of the Director of Works and the Engineers are now located. The structure has wide verandas, from which, perhaps, the most satisfactory view of the Park can be had, and as the Grand Band Stand is located just in front, they are destined to great popularity during the Exposition. The feature of the building is the costly oiled hardwood finish of the interior. Handsome mantels attract the artistic eye, and the furnishings are arranged for comfort at all seasons.

THE AUDITORIUM.

The accepted design for the Auditorium is Colonial in form and Ionic in treatment. Four porticos, facing the different points of the compass, give the floor plan a shape resembling a short cross, except for the circular colonnades connecting at each corner, forming a desirable promenade and restful place for weary sight-seers, while the roof furnishes a beautiful balcony, which not only adds to the charm of the design, but in addition affords a vantage point for the viewing of outdoor displays and pageants. The interior dimensions are 290 by 110 feet. The tower is 140 feet high. The architect is Mr. George W. Thompson. With a very large, commodious stage or rostrum, and a seating capacity of 5500, admirably lighted and ventilated, with good acoustic properties, as demonstrated in the inaugural exercises, it is eminently adapted for the purposes designed.



THE COMMERCE BUILDING.

The Commerce Building, where exhibits representing the Liberal Arts will be housed, will be the largest of the group, measuring 591 by 256 feet. The interior is divided into aisles and a nave, the former being 25 feet and the latter 45 feet high. The central pavilion is two stories in height, the second story forming a gallery on either side 141 by 160 feet, overlooking the nave, and is reached by four broad stairways, one at each end of the four corners. The general style is based on the Corinthian and Ionic orders of the Græco-Roman. Over the central pavilion a dome rises to a height of 175 feet, into which elevators will be run, in order that the visitor may enjoy the fine view afforded there of the Exposition beneath, and the city in the distance. Messrs. B. J. Hodge & Bro., are the architects.

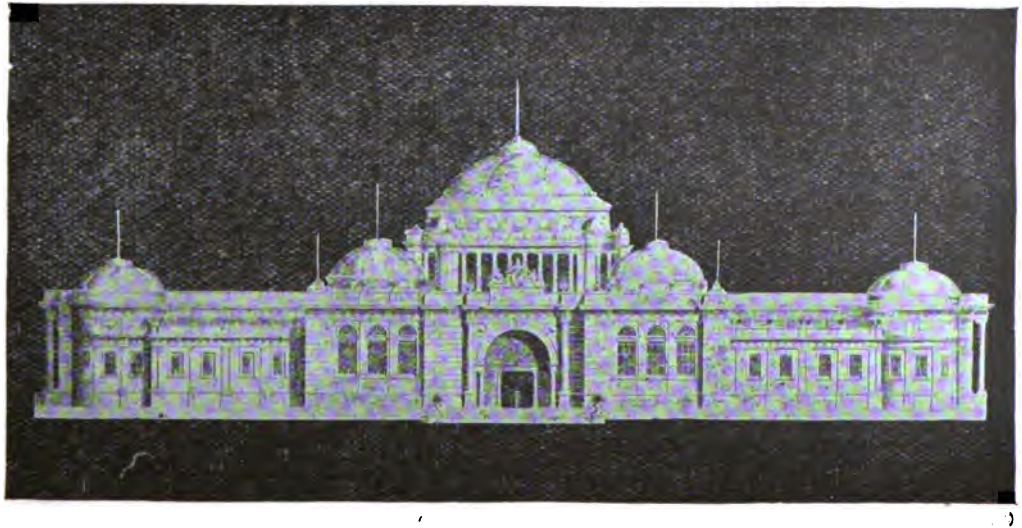
THE FINE ARTS BUILDING.

The Parthenon, the chief glory of all architecture, designed and completed under the direction of Phidias and Ictinus in the time of Pericles at Athens, is being reproduced exactly, as to outward form and color, on a high terrace in the center of the park. The building will be entirely fire-proof, with stone foundation, concrete floor, brick walls, and steel roof, the exterior being ornamented in moulded staff, in imitation of the original. Mr. Wm. C. Smith is the architect of the reproduction. Visitors on June 1 found the exquisite edifice complete, except for the delicate carvings on the pediments and the interior decorations. A stature of Pallas Athenæ, now being made in Paris, which, with its pedestal, will be forty-three feet high, will stand a short distance in front of the Parthenon; and a little further a true reproduction of the Rialto at Venice will span an arm of the principal lake.

THE MINERALS AND FORESTRY BUILDING.

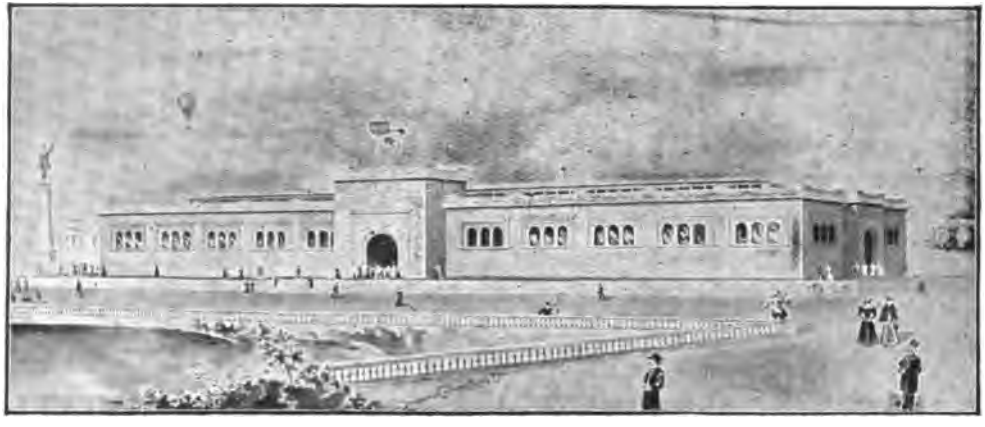
This building orignally designed for machinery, at a recent meeting of the Board of Directors has been assigned to Minerals and Forestry, and a new building commensurate with the demands of the important Department of Machinery will be immediately erected on another suitable site.

The Roman-Doric order of architecture, combining strength and beauty, was used as the motif for the Minerals and Forestry Building, of which Messrs. Gibel & Gaebler are the designers. The dimensions are 526 by 124 feet with an annex 162 x72 feet. The arrangement of the floor leads to three main entrances, marked by imposing porticos, with six columns each, crowned by gables sculptured in high relief in appropriate designs. It is 68 feet to the top of the roof. The north end of the structure borders on the lake.



THE AGRICULTURE BUILDING.

**The structure wherein will be displayed the products of the field will be considered by many people the most beautiful feature of the Exposition. The building was designed by Mr. Jul. G. Zwicker, and is in the Renaissance style of architecture. The dimensions are 300 by 200 feet, and the central dome, the feature of the design, rises to a height of 100 feet, while six minor domes balance and lend charm to the whole. The four entrances lead under triumphal arches, embellished with carving and surmounted by statuary. The domes will be partly constructed of opaque glass, which, with the plentiful supply of windows, will pour a flood of light on the exhibits. The location of the building on the grounds is such that its classical lines and fine proportions will be seen to splendid advantage from all directions.**

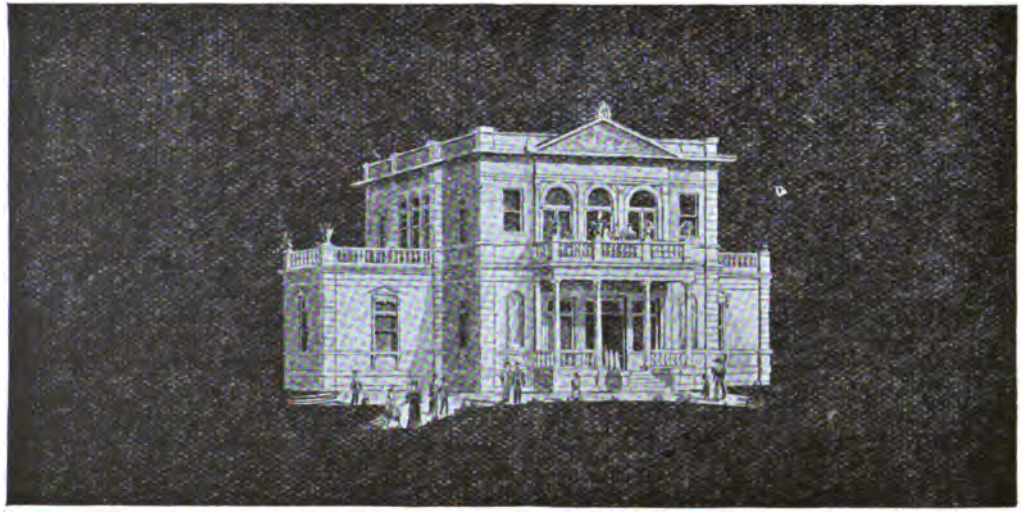


THE TRANSPORTATION BUILDING.

**The characteristic feature of the design selected for the Transportation Building, of which Mr. Jul. G. Zwicker is the architect, is its utmost simplicity. A most pleasing effect has been obtained without the use of a single column, merely in the grouping of the masses and proper proportioning. All structual ornamentation is in the most refined classic style, brought into strong relief by the wall surface, to which it lends beauty in charm in return. The building has a frontage of 400 feet and a depth of 125 feet. To lovers of dignity, coupled with refined simplicity in architectual design, it will afford a pleasing object with its air of grandeur and repose, so often lacking in a pretentious edifice.**

THE WOMAN'S BUILDING.

The Hermitage, twelve miles from Nashville, the home of Andrew Jackson when he was President of the United States, will be recognized by those who are familiar with it, in the design of this edifice; but the artist-architect, Mrs. Sara Ward-Conley, has idealized the Hermitage by adding to its Colonial style suggestions of the Greek school of architecture, and produced a strickingly beautiful effect. The central part of the interior is a large rotunda, with a grand staircase leading up right and left at the rear, and the balance of the building is divided into handsome apartments for classified exhibits. The second story of the left wing, as one enters, is a large assembly hall, in which numerous congresses of women will meet during the Exposition. The workmanship on the staff columns, the frieze and the figures, is of the highest order. The building has been finished, and is now the most attractive feature of the grounds.



THE CHILDREN'S BUILDING.

Of all the interests centering in the Tennessee Centennial, that of the children is not to be considered the least. When the idea of celebrating the end of the State's first century in history was first agitated, the children began work under systematic leaders, and they have raised by their own efforts the money with which their building will be erected. The design selected is pretty, and the interior arrangements will be especially suited to the uses for which the building is intended. Only such things as will amuse and instruct little ones will be admitted. In the rear of the building will be a beautiful grass-carpeted and shaded plot of ground containing fifty deer, and in front there will stand a tall tower with silver chimes in the belfry, bought, also, with money raised by children.

CHOLERA INFANTUM.—Physicians coincide in their views regarding the treatment of the summer diarrhœa of infants and children to a degree that enables it to be thus briefly summarized: Diet, emptying the alimentary tract, antisepsis. For the antiseptic treatment, listerine alone, or listerine, aqua cinnamon and glycerine, or listerine, bismuth and mistura creta, will meet many requirements of the practitioner during the summer months. The following well-tested formulæ are submitted:

℞ Listerine ..... ʒ i – ii
Simple Syrup..... ʒ vij – vi.

M. SIG. Teaspoonful every two or three hours.

℞ Listerine.
Glycerine (c. p.)
Syr. simpl.
Aqua Cinnamon, aa ℥i.

M. SIG. Teaspoonful every one, two or three hours.

℞ Bismuth Sub. Nit..... ʒ ss.
Tr. Opii..... gtt. xx.
Syr. Ipecac, } aa..... ʒ ij.
Syr. Rhei Arom. }
Listerine ..... ℥ ss.
Mist. Creta..... ℥ j.

M. SIG. Teaspoonful as often as necessary, but not more frequently than every three or four hours. This for children, about ten or twelve months old.

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THE CINCINNATI SANITARIUM is a private hospital for the cure and treatment of persons of unsound mind; with incidental provision for the more serious grades of "Neurasthenia," "Hysteria," "Nervous Prostration," etc., and the treatment of alcoholic inebriates, and persons addicted to the use of opium and other intoxicants. It is an incorporated institution, owned by stockholders, and governed by a Board of Directors, and a Medical Superintendent, of their own selection, who is not interested as a proprietor. It is now entering its twenty-second year of successful operation, having steadily grown to its present proportions from a beginning comparative small and imperfect.

The more conspicuous features of the Sanitarium to which the attention of persons interested is invited, are:

Perfect salubrity of location, exempt from atmospheric impurities of all kinds, combining the seclusion of the country with easy access to and from the city.

Facilities afforded by numerous buildings and sub-divisions for individual treatment of a variety of invalids, whether mentally or otherwise impaired.

Responsibility of the institution, now in its twenty-second year of successful operation, and its entire avoidance of all quackish, or meretricious pretentions or practices.

General reputation, acquired by successful treatment of so many insane and otherwise impaired persons, and the perfect candor of opinions given in all cases submitted by its professional staff, uninfluenced by financial contingencies or consideration of a proprietary character.

ORPHEUS EARTS, M.D., Supt., College Hill, Station, K., Cincinnati.

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MICROSCOPICAL EXAMINATIONS OF URINE, SPUTUM, TUMORS, ETC.—*Pathological and Bacteriological Laboratories University of Nashville.* Specimens may be sent, prepaid, by express or by mail, if enclosed in the regulation mailing cases, in every instance having the name of the sender written on the package.

*Urine* is to be put up in a four-ounce bottle with twenty grains of Chloral Hydrate, for preservation.

*Tumors*, or portions of them, or any other tissues, may be preserved during shipment in mixture of alcohol, two parts, water, one part.

*Sputum* is best sent in a tightly-corked wide-mouthed bottle.

Fee for examination, $5. Direct all specimens and letters to

LARKIN SMITH, M.D.

504 Church Street, Nashville, Tenn.

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THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.—The Twenty-second Annual Meeting of the Mississippi Valley Medical Association will be held at St. Paul, Minn., October 20, 21, 22 and 23, 1896. The following gentlemen have been appointed to deliver addresses: Dr. H. N. Moyer, Chicago, Address on Medicine; Dr. Horace H. Grant, Louisville, Address on Surgery. The indications are that the meeting will be the largest and most successful one in the history of the Association. As all the railroads will offer reduced rates for the round trip, an opportunity will be given to visit St. Paul and Minnesota during the most delightful season of the year.

H. O. WALKER, M.D., Detroit, Mich., President.

H. W. LOEB, M.D., 3559 Olive Street, St. Louis, Secretary.

C. A. WHEATON, M.D., St. Paul, Minn., Chm. Com. of Arrangements.

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"MR. J., aged 35 years, a civil engineer, was troubled frequently with rheumatism in left shoulder and side of neck, and at such times could not move without suffering great pain. I was called in to treat a severe attack of this kind, which was also complicated with supraorbital neuralgia. I prescribed salol and coal-tar derivatives with but little benefit. I

then placed him upon Tongaline liquid, instructing him to take a teaspoonful, well diluted, every hour. Within twenty-four hours the pain had entirely left him, and he soon made a complete recovery."

GILMAN R. DAVIS, M.D., Ironton, Ohio.

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LENNOX BROWNE, F. R. C. S., Senior Surgeon to the London Throat & Ear Hospital, in a letter to Mr. Fellows, referring to his Compound Syrup of the Hypophosphites, writes:

"Having thus a considerable experience of the preparation, I have much pleasure in advocating its use by my professional brethren, with a confident expectation that their experience will be equally gratifying with my own.

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PEPSIN is undoubtedly one of the most valuable digestive agents of our Materia Medica, provided a good article is used. Robinson's Lime Juice and Pepsin, and Arom. Fluid Pepsin, we can recommend as possessing merit of high order. The fact that the manufacturers of these palatable preparations use the purest and best Pepsin, and that every lot made by them is carefully tested, before offering for sale, is a guarantee to the Physician that he will certainly obtain the good results he expects from Pepsin.

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WAYNE'S DIURETIC ELIXIR still retains the enviable position of a most valuable remedy in all irritations of the genito-urinary organs. Prof. W. F. Glenn, of this city, and other specialists in genito-urinary work, speak of it in the highest terms. It is prompt in its action and acceptable to the most delicate stomach, and from repeated trials we place a high estimate on its valuable therapeutic properties.

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MICROSCOPICAL AND BACTERIOLOGICAL information is of the greatest importance in the diagnosis of many diseases. Many physicians are but illy prepared, and others have not the time and opportunity at their disposal for obtaining thorough and satisfactory results. To them the notice in this issue of Dr. Larkin Smith will be of interest, and we can assure them that perfect confidence and reliance can be placed in all cases submitted to him.

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and report of cures effected at the clinics of the Universities of Bonn and Griefswald, Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

# Reviews and Book Notices.

A MANUAL OF ANATOMY. By IRVING S. HAYNES, PH. B., M.D., Adjunct Professor and Demonstrator of Anatomy in the Medical Department of the University of New York; Visiting Surgeon to the Harlem Hospital; Member of the Society of the Alumni of Bellevue Hospital, of the American Association of Anatomists, Etc., Etc. 8 vo., cloth, pp. 680, with 134 Half-tone Illustrations and 42 Diagrams. Price $2.50 net. W. B. SAUNDERS, Publisher, 925 Walnut Street: Philadelphia: 1896.

The writer's experience as a teacher in anatomy for several years is utilized in stating the "facts of anatomy" which have been gathered from the standard text-books. Nothing new is presented except a slight contribution touching the visceral relations, obtained by means of composite photographs.

The anatomy of the extremities has been treated as fully as its requirements seemed to demand.

Descriptions of the bones and joints, and of minute parts requiring special preparation for their dissection have been omitted, and surgical references have been avoided, except when it seemed advisable for the student's good to suggest the application of a process or a description.

A brief history of the development of the most important organs is included. The descriptions are given in the natural order—that is, the order in which the structures are discovered in the dissection.

The work is handsomely printed on good paper, and while it cannot fill the place of the more comprehensive text-books, it will prove a most efficient adjunct to the study and full understanding of this most important fundamental department of medicine and surgery.

DIETS FOR INFANTS AND CHILDREN IN HEALTH AND DISEASE. By LOUIS STARR, M.D., Editor "American Text-Book of Diseases of Children." Price $1.25. W. B. SAUNDERS, Publisher, 925 Walnut Street: Philadelphia: 1896.

Those who desire to be methodical and systematic in the feeding of infants and children will find these diet lists (detachable) very convenient. Some excellent practical suggestions are the preparation of Diluents and Foods as found at the end of the lists.

OBSTETRICAL ACCIDENTS, EMERGENCIES AMD OPERATIONS. By L. C. H. BOISLINIERE, A.M., M.D., LL.D. Late Emeritus Professor of Obstetrics in the St. Louis Medical College, Etc. Illustrated. Philadelphia: 1896. W. B. SAUNDERS, Publisher, 925 Walnut Street. 8vo., cl., pp. 381. Price $2.00.

"This is not a treatise on midwifery nor a manual of obstetrics," is the modest statement set forth in the preface, but the reader will find in it the essentials in accidents, emergencies and operations, and a careful study of its pages will prove of incalculable benefit in many cases where additional counsel or a reference to the more complete works is not attainable. While parturition is a physiological process and should be fully understood by every practitioner of medicine, it sometimes, unfortunately, becomes pathological, in which event the essentials so clearly set forth in this admirable little volume, will prove of incalculable value. It will prove of great value to students, and as well to young practitioners, who may at any time be placed in a trying and difficult position. The press work, paper and illustrations are excellent.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science by leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M.D., New York City. In twenty volumes. Vol. V. Diseases of the Skin. New York: WILLIAM WOOD & COMPANY. 1896.

In this volume of the magnificent series being brought out by Messrs. Wm. Wood & Co., diseases of the skin are fully considered, the text being brought fully up to date, and the volume is a worthy companion to the excellent ones that have preceded it.

Charles W. Allen, M.D., New York; John T. Bowen, M.D., Boston; L. Brocq, M.D., Paris; L. Duncan Bulkley, M.D., New York; H. Radcliffe Crocker, M.D., London; James Nevins Hyde, M.D., Chicago; Moriz Kaposi, M.D., Vienna; H. Leloir, M.D., Lille; D. W. Montgomery, M.D., San Francisco;

Arthur Van Harlingen, M.D., Philadelphia, and H. Whitehouse, of New York, are the contributors.

The subjects considered are as follows: Anatomy of the Skin and its Appendages, Parasitic Diseases, Erythematous Affections, Eczema and Dermatitis, Squamous, Papular, Bullous, Pustular, Phlegmonous and Ulceration Affections, Diseases of the Sebaceous Glands, of the Sweat Glands, and of the Hair and Nails, Benign Neoplasms, Xeroderma Pigmentosum, Dermatoneuroses. A full and comprehensive index completing the volume.

BORDERLAND STUDIES, MISCELLANEOUS ADDRESSES AND ESSAYS. Pertaining to medicine and the medical profession, and their relations to general science and thought. BY GEORGE M. GOULD. Formerly editor of the *Medical News*, Philadelphia: P. BLAKISTON, SON & Co., 1012 Walnut Street. 8vo., cl., pp. 380. Price $2.

In this work we find some of the most able articles published by the thoughtful, logical and earnest editor of the *Medical News*, together with essays published in *The Forum*, *The Monist*, and *The Open Court*, which are thus placed on permanent record. The following subjects are most thoughtfully considered by the author: Vivisection, Medical Language, Maternal Instinct in Organic Evolution, Life and its Physical Basis, Medicine a Science, Duty of the Community to Medical Science, Charity Organization and Medicine, Hospitalism, Quackery, The Lay-Press in Medical Matters, Disorganization of Medical Science, Specialism, Medicine and City Noises, Life Insurance, Foot Ball, Muscular Development, Everybody's Medical Duty, The Power of Will in Disease, Hysteria and Whimsicality, Character, The Modern Frankenstein, Dreams, Sleep, and Consciousness, Human Life Under Denied Sensation, and Immortality.

In the clear-cut views here given in a most logical manner, and with absolute sincerity, we have much food for thought, and the time spent in going through the pages of this work will not only prove a pastime, but result in material well worth the time devoted thereto.

A TEXT-BOOK OF BACTERIOLOGY. By GEORGE M. STERNBERG, M.D., LL.D., Surgeon-General U. S. Army. Illustrated by heliotype and chromo-lithographic plates and 200 engravings. Cl., 8vo., pp. 693. Price $5.50. New York: WILLIAM WOOD & Co. 1896.

The Manual of Bacteriology by the same author, published in 1893, had so large a sale, and was so well received, that it has seemed advisable to issue a new work embodying all of the practical matter contained in the manual, together with such advances as have been made since the former date, and omitting all those portions of the older work which were in any respect theoretical, or pure scientific without practical application. In other words, to make a book especially fitted for the use of the practitioner and student of medicine. This we believe the present volume accomplishes, and, with added illustrations, it is without exception the finest text-book of bacteriology published in any language. The price brings it within the reach of students who would not care to purchase a more expensive book.

No expense has been spared in getting up the book, and it should fill a distinct want, and be widely appreciated. This is essentially an American book by an American author, whose ability has been well established, and is unquestionably the ablest and most comprehensive text-book on bacteriology in the English language; and we feel fully satisfied that it will command the position of a *standard* at the hands of students, teachers and practitioners.

QUIZ-COMPEND No. 14, DISEASES OF CHILDREN. By MARCUS P. HATFIELD, A.M., M.D., Professor of Diseases of Children, N. W. U. Medical School, Etc., Etc. pp. 220; second edition, thoroughly revised, with colored plate. Price 80 cents. P. BLAKISTON, SON & Co., Publishers, 1012 Walnut Street: Philadelphia. 1896.

This is another meritorious candidate for class-room honors, which has early reached a second edition. The metric system used by Dr. Hatfield in some instances, while possibly in the line of advance, may be objected to by some. However, the mass of information condensed in so practical a manner is an offset that would counterbalance even objections of far greater degree. The facts laid down are condensed from the standard works of the day.

QUIZ-COMPEND No. 7, GYNECOLOGY. By WM. H. WELLS, M.D., Adjunct Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic. pp. 262, with 150 illustrations. Price 80 cents. P. BLAKISTON, SON & Co., Publishers, 1012 Walnut Street, Philadelphia. 1896.

Few series of books issued by any house have met with so universal approval as these Quiz-Compends. They are most excellently arranged, full and concise, and have proved of great assistance to students in retaining the more full instruction of standard text-books. Dr. Wells has here a mass of information nowhere else collected in such condensed, practical shape.

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PHASES OF THE MOON.—Any of our readers, whether disciples of Isaak Walton, or Planters of Potatoes, will be enabled to keep themselves thoroughly posted during the current month of fair Luna's changes by reference to the unique advertisement of The Antikamnia Chemical Company. We will say, however, that we have never found any change whatever in the successful and satisfactory results to be obtained from the excellent product of their laboratory.

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A MEANS OF EMPTYING THE BLADDER.—The bladder when partially paralysed from parturition, or any other cause, can always be made to empty itself perfectly by throwing a large amount of very warm water into the bowel, thereby doing away with the necessity of using a catheter, a most important consideration, particularly when the patient lives at a distance from the doctor.

After difficult and protracted labors I have been obliged to use the catheter every day for weeks at a time, which was annoying to the patient and inconvenience to myself. Since using the above recommended plan, I have had no trouble in this direction, the bowel and the bladder emptying themselves at the same time. —*Dr. Edward Anderson in Charlotte Medical Journal.*

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APPENDICITIS.—I am not always in a great hurry to operate, but I am inclined to wait for the more acute symptoms to wear off, and operate, if at all, after suppuration has taken place, or during the quiescent stage, between the attacks. I wish my voice was strong enough, just here, to call a halt to the men who say: "Operate at once—not this afternoon or to-morrow, but now," in all cases when the disease is recognized.—*McGuire, in the Record.*

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## Original Communications.

### DIAGNOSIS OF EARLY PHTHISIS PULMONALIS.*


BY HAZLE PADGETT, M.D.,

*Professor of Physiology in the Medical Department of the University of Tennessee.*


The successful treatment of many diseases depends upon an early diagnosis, and this principle applies eminently even in the early recognition of the various forms of tuberculosis. I do not mean to say that even after we have discovered the presence of tuberculosis in the lungs we will be able to cure the patient, but I do mean to say that we are better prepared and with better prospects of prolonging the patient's life by the use of appropriate means. Any one is able to make the diagnosis of consumption after the disease has lasted some time and has produced extensive changes in the lungs and other organs, and often the diagnosis has been made by some of the laity; but what I am

*Read at last Meeting of Middle Tennessee Medical Association.

laying special stress upon is the early diagnosis of phthisis pulmonalis.

In this paper I will mention those signs and symptoms that have served me so well in the early recognition of this disease in the lungs; not that these signs and symptoms are anything new, but the way in which they are studied.

I will call your attention to the study of the temperature, respiratory rate, analysis of the respiratory rhythm, the cardiac rate, and a few other points.

In all acute infectious diseases we have a decided rise in temperature, but in many of the chronic diseases we have no temperature rise at all unless there is an acute exacerbation engrafted upon the chronic process. I consider the careful study of the temperature as of vital importance in the diagnosis of phthisis pulmonalis. You will not get a decided rise, for the tubercular process is not of that rapid destruction of tissue that gives a high rise in the temperature curve, unless it is an acute miliary tuberculosis, when the process may run its course in a few weeks or as many months; and then we get many times a hyperpyrexia. It is not of these cases that I speak, but of those cases where the tubercular process is so insidious, and where those changes that occur in the lungs later in the disease are not at all manifested, that I call your special attention to the study of the temperature.

You will notice a rise of probably three-fifths to one degree during the twenty-hours, and at this particular time many of the patients are feeling comparatively well—not incapacitated by their little bad feelings to remain away from their work. They attribute their bad feelings to a little indigestion, dyspepsia, or "liver inactivity," and in fact many such supposed causes; and if we do not study the case exceedingly carefully and analyze all the symptoms minutely, we will be misled in attributing the rise of temperature so slight to a little attack of malaria, or the patient's indisposition to indigestion and dyspepsia.

I have studied the slight temperature rise in early tuberculosis so long, watching carefully its variations and temporary cessations to begin again, that if I see a patient exhibiting a daily rise of temperature of from a little less than 1° to 1° or a fraction more, and showing this rise regularly for seven or eight

weeks, I think very seriously of tuberculosis; but it may not be of the lungs, of course, after having eliminated all other sources for such a rise; yet I have my first disappointment to meet. To some this may seem a rather radical statement to make; but, however, in my personal observation and close study in the temperature curve in the early manifestations of tuberculosis I have been led to this conclusion.

The reason that I lay so much stress upon the study of the temperature curve is that this symptom is manifested before we are able to demonstrate by physical means any anatomical change or changes in the lungs or other organs; and I feel that if we were careful in the study of this particular point we would be able to make a correct diagnosis in many cases before any anatomical changes are capable of being demonstrated. When we see a patient presenting no regularity of symptoms, and upon taking his temperature find it something like 99⅘° to 100° for the first time, and on examining the respiratory tract find nothing to attract our attention, and examining equally carefully every other organ and failing to find the cause in any local disease, I do not mean to say that we would make the diagnosis of tuberculosis upon the result of the first temperature observation; but suppose, after repeated examinations over a period of eight or ten weeks, we would notice the same daily rise without the development of any other disease to attract our attention and to account for the daily rise that we have observed, I believe upon this evidence alone the majority of careful observers would think of tuberculosis. As I have said, and laying special stress upon the statement, after we have eliminated rationally the other possible causes for such a daily rise; for in this length of time if there were other causes they would manifest themselves in additional signs and symptoms.

Another point that I wish to emphasize is an increase in the respiratory rate, and this is out of proportion to the rise of temperature, and before we are able to demonstrate any changes in the lungs. The respiratory rate may be 25, 28, or as high as 30. I have been in the habit for a long time of counting the respirations in patients who present obscure symptoms, and this, many times, I admit, is from the force of habit; yet I feel that the time spent has been well appropriated. If I should not discover

anything, so much for the patient; and if I should, I may have probably gained something in making up my diagnosis. I am in the habit of teaching my students in the medical class to examine the chest thoroughly when they find the respiration rate greater than normal.

We are all familiar with the respiratory or vesicular murmur. I consider the analysis of the respiratory sounds of the utmost importance. I do not mean the superficial auscultation of the respiratory murmur by simply placing your ear or stethoscope over a portion of the chest and simply listening to hear if the patient is breathing. In the first, place obtain the vesicular murmur and analyze its character. I mean by this, is the respiratory murmur of that smooth, even character and of sufficient strength for a person in the particular physical condition of the person being examined? Has it deviated and become of a rather harsh character and having an apparent increase in its intensity? Does it lack intensity and become weak and feeble, or is it entirely absent? Compare the analysis of corresponding regions. Is there an irregularity in the dilatation of the alveoli, giving us a cog-wheel respiratory murmur? What is the relation between the time of respiration and expiration? Has expiration the same length as inspiration? Has it become much longer, and is it of a high pitch? These are questions that I always ask myself; truly, they now come involuntary from the force of habit.

In comparing different portions of the chest, I always make the person take a number of deep (forced) inspirations and expirations, and by this means I am able to detect the difference in the intensity and quality of the respiratory sounds; but if possible I compare the areas examined while the patient is breathing naturally, and then make him take the forced breathing, and by this simple process I often dedect rales of the subcrepitant and larger varieties, when everything previous to this process of forced breathing had failed to elicit any adventitious sounds. While the irregular dilatation of the alveoli, giving the cog-wheel respiration, is not always an indication of a tubercular process, yet I have noticed it so often in early phthisis pulmonalis, before there are any gross changes to call your attention to a morbid process going on secretly in the lungs, that when I discover it in connection with the early rise of temperature I have

specially tried to emphasize, I feel that my diagnosis has been aided very materially.

The specific bronchitis with expectoration that these patients have later in the disease is absent, and we are unable to obtain any sputa for examination, and this means of diagnosis has been deferred until we are able to get the sputa; and in many cases by the time that period comes the diagnosis has been made by other signs and symptoms. When possible, in obscure cases we make microscopical examinations of the sputa, and should we discover the presence of bacilli there are several sources other than the lungs that could furnish them; a tubercular larynx with ulceration, a tubercular ulcer in trachea, or a tubercular gland that has opened into a bronchial tube. In tuberculosis of larynx we have signs and symptoms that refer us to that organ, but, nevertheless, the presence of bacilli with the signs and symptoms just studied makes the diagnosis complete.

In the earlier stages the patient may or may not have a cough, and, if one is present, many times no expectoration, and there is nothing characteristic in the cough; may be just a few expulsory efforts—a mere hack that hardly attracts the attention of patient or physician. The character of cough in this earlier stage seems to be one of irritation rather than inflammation.

The pulse-rate is accelerated in the earlier stages, and this is independent of any valvular lesion that may exist, which, if it plays any part in the increased rate, we can usually tell. The pulse is out of proportion to the rise of temperature and the loss of flesh and strength. Study carefully the rate, regularity, and the force of the pulse. Loss of flesh, not so extensive in amount, will be noticed by patient, and be attributed to an existing indigestion or dyspepsia. In the earlier stages, before you will notice any marked anæmia, flabbiness of the muscular system, and while the patient's nutrition is good, you will notice a rise of temperature. These signs and symptoms, unless the progress of the disease is checked, grow more and more until the disease is very easy of diagnosis; and as the disease progresses, quite a number of other symptoms and signs are added, and the picture gradually, but progressively, develops until the curtain falls and closes the scene of life.

# LARYNGEAL TUBERCOLOSIS.*

BY T. HILLIARD WOOD, M.D.,
*Professor of Diseases of the Eye, Ear, Nose and Throat in the Sewanee Medical College; Professor of Diseases of the Eye, Ear, Nose and Throat in the Medical Department of the University of Tennessee.*
*Nashville, Tennessee.*

About one century ago laryngeal tuberculosis made its appearance in medical literature, and has since received an ever-increasing amount of attention from the profession.

*Etiology.*—The causes of laryngeal tuberculosis may be divided into two classes: 1. The predisposing; 2. The exciting.

As predisposing causes may be mentioned sex, age, and the tubercular diathesis. Men are more commonly affected than women, on account perhaps, of the greater exposure which their mode of life entails.

While laryngeal tuberculosis may occur at almost any age, yet the large majority of cases occur between the twentieth and fortieth years of life. I have recently had a case in a patient sixty-eight years old.

That the tubercular diathesis is hereditary and is a powerful predisposing factor none will doubt. That of itself it is sufficient to cause the disease may well be questioned. I regard the tubercular diathesis as important in that it prepares the soil for the development of the seed—the tubercle bacillus, the active cause of tuberculosis.

Among the exciting causes of laryngeal tuberculosis is pulmonary tuberculosis. Tubercle in the lungs almost always precedes tubercle in the larynx. So constantly is this true in practice that some authors have declared laryngeal tuberculosis to always be a secondary disease. While I can see no apparent reason why tubercle might not be deposited primarily in the larynx, yet I have never met with a case, nor have many practitioners of large experience.

The method by which pulmonary tuberculosis produces lar-

* Read before the Middle Tennessee Medical Society.

yngeal tuberculosis has provoked much discussion. The theory of Louis that it is due to the corroding action of the expectoration passing through the larynx is not plausible, and seems to have few adherents at present. It is much more probable that the laryngeal disease is due to the absorption of tubercle bacilli during the passage of the expectoration over the mucous membrane. Bosworth thinks that a previous catarrhal inflammation of the larynx is important as affording suitable soil for the development of the tubercle bacilli.

The question of contagion is germain to this subject, but I shall not discuss it further than to say that I firmly believe in the contagiousness of tuberculosis by transmission through the atmosphere and inspired air; and in treating these cases every means should be taken to prevent extension to other individuals.

Laryngeal tuberculosis occurs, according to different writers, in from thirteen to thirty-three per cent. of cases of the lung disease, and is generally developed in the second and third stages of the pulmonary trouble. The statistics of laryngologists upon this point, however, are liable to be misleading, because cases of laryngeal tuberculosis apply to them for relief from the throat symptoms, while the large majority of cases of consumption which have no throat lesions never come under their observation. Hence the per cent. of cases of laryngeal tuberculosis occurring in pulmonary consumption should be smaller than stated above.

Pulmonary tuberculosis is quite commonly followed by secondary deposits in various organs of the body. According to Heinze, the secondary deposits occur in organs according to the following descending scale: In the intestines, larynx, liver, kidneys, pleuræ, spleen, glands, trachea, peritoneum, meninges, sexual organs, omentum, tongue, bronchi, pharynx, etc.* It is thus seen that the larynx is, next to the intestines, the most frequent site for the secondary deposit of tubercle.

*Pathology.*—While tubercle may be deposited in any portion of the larynx, yet the favorite site for the initial lesion is the membrane covering the arytenoids. Next comes the ary-epiglottic folds, the true vocal cords, and epiglottis. The deposit

*MacKenzie.

of tubercle is preceded by a pale, anemic condition of the throat. Following this the arytenoids enlarge, having a pale, pear-shaped appearance. This deposit of tubercle breaks down, and an ulcer forms. These ulcers, by extension laterally, may involve any part of the laryngeal membrane. The tubercle may be deposited in the perichondrium, giving rise to perichondritis and necrosis of cartilage. When the vocal cords are attacked they become thickened, and later ulcers form, giving the cord a jagged outline.

*Symptoms.*—One of the earliest symptoms is impairment of the voice. This may be due to either imperfect approximation of the cords, as when the lesion affects the arytenoids or interarytenoid commissure; or to defective vibration, as when the cords themselves are involved; and later, from the infiltration of the muscles and anchylosis of the articulations of the larynx, the voice may be still further weakened. I have never examined a case of laryngeal tuberculosis that did not have aphonia, and this symptom was found by MacKenzie in ninety-two per cent. of the five hundred cases examined by him. These patients, however, make themselves well understood by the whispering voice.

Another common symptom is difficult deglutition. This may be due either to the pain, or to the mechanical obstruction of an enlarged epiglottis, or to food entering the wind-pipe. Swallowing may become so troublesome as to constitute a grave condition on account of the difficulty of the patient's taking sufficient food.

Sore throat, cough, shortness of breath, and expectoration are commonly met with. Hæmoptysis, occurring so often in these cases, usually has its source in the lungs. The tubercular ulcer in the larynx rarely bleeds, differing markedly in this respect from malignant ulceration, which bleeds so freely. The tubercular cachexia usually present in pulmonary tuberculosis has seemed to me to be exaggerated in the laryngeal disease.

*Diagnosis.*—The diagnosis of laryngeal tuberculosis is made by the forgoing symptoms, by the presence of pulmonary tuberculosis, by the laryngoscope, and by the microscope. The presence of pulmonary consumption is exceedingly important in establishing the diagnosis. In this connection it should be re-

membered that the laryngeal disease is practically always secondary to the pulmonary, and that, therefore, to exclude lung disease is to cast the gravest doubt as to the tubercular nature of a laryngeal lesion.

With the laryngoscope every part of the interior of the larynx is plainly visible, and the features of the local lesion can be clearly seen. But when the ulcer is seen the question of differential diagnosis comes up. Is the ulcer a tubercular, a syphilitic, a maglignant or a catarrhal one?

In tubercular cases the entire throat often seems pale. Again, the throat symptoms come on slowly and only after the pulmonary symptoms have existed for some time. On the other hand, in syphilitic cases the throat symptoms come on acutely, and are not preceded by pulmonary symptoms. In phthisis the ulcers are oftenest on the arytenoids, and are multiple; in syphilis the ulcer is oftenest on the epiglottis or ventricular bands, and is single. In phthisis the ulcers have ill-defined margins, and a pale, swollen base. In syphilis the ulcer has a clean-cut margin with an inflamed areola around it. In this differential diagnosis, however, the main reliance is to be placed on the microscope and the effects of anti-syphilitic treatment. With the microscope we usually detect the tubercle bacillus in phthisis; and mercury and potash relieve syphilitic ulcers, but do not benefit tubercular ones.

Tubercular ulcers of the larynx are distinguished from cancer by the fact that the latter occur usually after the fortieth year of life in people without consumption, and are generally situated on one of the false vocal cords. Moreover, the malignant ulcers usually have a fungus character, and are usually attended by a characteristic fœtor of the breath.

*Treatment.*—The treatment may be divided into constitutional and local. The constitutional treatment does not differ from that of consumption of the lungs. In this connection, however, I wish to advocate terraline as a substitute for cod liver oil. Terraline, as is well known, is a product of petroleum. For the past eight years I have used it habitually in these cases, and for any case in which cod-liver oil is given. I have found it superior to cod-liver oil, not only in being far more palatable, but in the greater relief afforded the patient. It should be given,

after meals, in tablespoonful doses, with an equal quantity of wine or whisky.

Locally the ulcers in the larynx should be cleansed, and if foul should be curetted. Some of the mineral astringents—as zinc, alum, or silver—should then be applied in solution by means of a spray; and, lastly, the ulcers powdered with iodoform, or an ethereal solution of iodoform sprayed into the throat. The application of lactic acid has some cures to its credit, but I have never used it.

An important indication to be met in many cases is the difficult deglutition. If this comes from pain, it may be relieved by blowing morphine diluted with starch or sugar into the larynx with an insufflator about one hour before meals; or perhaps greater relief may be had by spraying a solution of cocaine into the larynx just before taking food.

If the difficulty comes from the entrance of particles of food into the wind-pipe, the patient may, as suggested by MacKenzie, take the thickened liquids. Arrow-root, corn flour, or isinglass may be used to give the proper consistence to the fluids. In extreme cases it is advisable to feed the patient through a tube introduced well into the œsophagus.

Tracheotomy has been done in these cases to facilitate respiration and afford rest to the larynx. It cannot, however, be said to possess real virtue, and is only justifiable in cases of threatened suffocation from acute œdema, impaction of necrosed cartilage, or some temporary and curable condition.

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## ENDOMETRITIS.*

BY J. T. REDDICK, M.D., OF PADUCAH, KY.

Endometritis is the term applied to an inflammation of the uterine mucous membrane.

In the light of modern investigations upon the pathology of pelvic disease, endometritis becomes at once a subject of vital importance, as it is the starting point in the majority of in-

*Read at the meeting of the Southwestern Kentucky Medical Association, May 13, 1896.

stances, of all inflammatory conditions affecting the pelvic organs and peritoneum.

With a knowledge, therefore, of this fact before us, we will be better able to appreciate the necessity of holding clear and definite ideas upon the causes of this disease and its results, and can keep well in mind the urgency in some of its varieties for prompt and radical treatment.

In dealing, therefore, with endometritis, we must forget the teaching of the past, and remember only the lessons taught us through the advances made in the pathology of pelvic diseases. We have different varieties of endometritis, viz: The congestive, the constitutional, the septic, and the gonorrhœal. But inasmuch as this is a paper dealing more especially with the treatment of endometritis, it is not necessary to speak except in a passing way of the different varieties.

We may mention some of the many causes of endometritis, as the treatment necessarily depends largely upon the cause. Displacements of the uterus, cold, narrowing of the cervical canal, subinvolution of the uterus, lacerations of the cervix and perineum, constipation, sexual excesses, scrofulous and tuberculous diatheses, gonorrhœa, sepsis following labor and abortion, sloughing polypi, malignant degeneration of the uterine mucous membrane, and the use of dirty instruments, or their improper application in the diagnosis and treatment of intra-uterine disease.

The treatment of endometritis is directed first, to the cause, and, second, the removal of the results of the inflammation upon the uterine mucous membrane.

In the constitutional varieties of the disease we must not lose sight of the fact that the general condition of the patient is primarily responsible for the pathological changes taking place within the cavity of the uterus. Hence, our first effort must be to correct those vices of the constitution referred to in discussing the etiology of endometritis; it would be useless, therefore, in these cases to attempt a cure by local treatment alone. In those cases due to uterine misplacements, to lacerations of the cervix or perineum, or to pelvic tumors, the indication is to remove the cause, and at the same time, or subsequently, treat the local disease within the uterine cavity. The old routine intra-uterine

"swabbing," as a local treatment, is dangerous, because it can not be carried out under strict asepsis, and is useless in chronic cases, because the deeper structures of the mucous membrane are affected, and we are unable to exert any influence upon them with applications made directly to the surface of the endometrium. Therefore, to cure the disease we must remove the affected tissues, and this is best accomplished by means of the curette. The operation of curetting consists in the dilatation of the uterus, with some good dilator, thorough removal of the mucous membrane with the curette, flushing the cavity with a bichloride solution and the application of iodized-phenol to the interior of the uterus, or, as many gynecologists teach, packing the cavity of the uterus with sterilized iodoform gauze, and letting it remain from twenty-four to thirty-six hours.

Although I have followed this method of intra-uterine gauze packing in a number of cases, yet I am convinced it is not always best to do so. What we want in these cases is uterine drainage, and by packing, in many cases, we prevent that which we want.

The gauze allows only fluids to percolate through it, retaining all the debris and clots. Gauze packing also, sometimes, causes uterine contractions, so that, until you remove it, your patient is about as comfortable as though she was having a miscarriage. Another disadvantage of gauze packing is the very great nausea sometimes produced. I remember to have had a case last summer in which the gauze caused an intense nausea until it was removed; the patient said she had suffered greatly from nausea during the early months of pregnancy. If there is much hemorrhage I believe that packing is advisable.

The after-treatment of endometritis, following curettage, consists of rest in bed, hot douches, an occasional application of iodized-phenol, wool-glycerine tampons, etc. As an after-treatment, I derive much benefit from the administration of a capsule containing quinia, sulp. iron, ergotine and strychnia.

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# A CASE OF STRYCHNINE POISONING.*

BY S. E. COX, M.D., OF NASHVILLE, TENN.

At 10 o'clock P.M., June 14, 1896, I was hurriedly summoned to attend Mr. H., of this city, who was reported dying. On my arrival I found the patient to be a man 30 years of age, married, of robust figure, and whose previous history (except occasional attacks of frequent micturition at night) was good. He was in a state of tonic convulsion, with some cyanosis, distorted features, the face drawn into a grin (Risus Sardonicus), fixation of lower jaw, rigid neck, dilated pupils, slow full pulse, and jerky respiration. This condition had been present almost continuously for about twenty minutes. During these twenty minutes, however, there were momentary intervals when he was able to speak.

As at the time I first saw him the tonic convulsion was so severe as to make speech or any other sign of consciousness impossible, and as death seemed so rapidly approaching, I immediately gave him $\frac{1}{8}$ grain Pilocorpine Mur. hypodermatically, and consulted his wife for a possible source of poisoning or other cause, but with no avail. By this time the patient was perspiring freely, and had relaxed sufficiently to speak, when he told me that he had taken at 8:30 P.M. (one hour and a half previously) 8 grains of Strychnine, and requested that I save him if I possibly could. I at once ordered large quantities of mustard-water given him, while I prepared and gave him a hypodermatic of 1-5 grain of Apomorphine Mur., this producing vomiting in from seven to eight minutes. Not having a stomach tube with me, I continued the free administration of the water between vomiting spells, and gave him a second hypodermatic of apomorphine. At first a large quantity of undigested food was vomited; later, only the water which he was repeatedly made to drink. When the vomiting ceased I gave him a second hypodermatic of

*Reported at Nashville Academy of Medicine, July 9, 1896.

¼ grain of Pilocarpine Mur., followed with large doses of Potass. Bromide and Chloral Hydrate.

There was no prolonged convulsion after the administration of the first dose of Pilocarpine, but muscular twitchings, with pronounced nervous rigors continued, gradually diminishing, till the third day. During the night, before sleep was produced, when the nervous rigor was approaching, he would cry out for attendants to hold him. I noticed no priapism, no ejaculation of semen, though at first they were not looked for. After 2 o'clock A.M. he slept quite well, and was jovial and bright next morning.

This day, June 15th, he insisted that he was quite well, with the exception of some general soreness, muscular twitchings and nervous rigors. Bowels acted twice, but he voided only about three or four ounces of light colored urine. Later the same day, catheter was used, and the bladder was found empty.

On June 16th muscular twitchings and nervous rigors had greatly diminished, but he complained of pain in region of loins. The urine was still scanty and clear. A full dose of Epsom Salts was given with no effect. An enema was ordered, which produced a very slight watery evacuation. Diuretics and Poland Water were given freely throughout the day. Pulse was now ranging from 64 to 68 per minute, full and strong.

On the third day, June 17th, the muscular twitchings and nervous rigors had almost entirely disappeared, and the general soreness previously complained of was greatly lessened. Urine still scant, getting with catheter less than four ounces in twenty-four hours. Constipation marked, with severe spasmodic abdominal pain below the umbilicus. One bottle of Sol. Citrate Magnesia followed with enema of glycerine and water was given in the afternoon, but failed to act.

The following morning, June 18th, about the same condition obtained with, as new features, some tympany and abdominal tenderness.

Dr. Ross Dunn was requested to see the case with me in the afternoon, which he did. At this time the abdominal pain was severe, requiring the administration of morphine to control it. There was some tympany with tenderness over the whole abdomen. The pulse, which in the forenoon had been ranging from

60 to 62, had increased to 70, still full and strong. The temperature was 99⅕°. Dry cupping was made over region of kidneys and Epsom Salts ordered every hour until bowels moved, or patient was seen later in the evening. About one ounce of urine was withdrawn from the bladder for examination, which was still of light color, though not so clear as it had been before. This sample was found later to contain a large quantity of albumen, with some hyaline and epithelial casts.

In the evening of this day, Drs. W. L. Nichol and M. C. McGannon were called in consultation. There was now an approaching semi-comatose condition, and though Epsom Salts had been given hourly for four hours no effect had been produced. Twenty grains of calomel with twenty grains of bicarbonate of soda was given and patient placed in hot pack. Half an hour later bowels moved and abdominal pain and tympany disappeared. Free perspiration followed the pack. The catheter was again used and hæmaturia found.

The following day, June 19th, coma was marked, pupils contracted, temperature elevated, pulse 90, and respiration stertorous in character and 10 per minute. Bowels had moved freely the night before. The hot pack which had been kept applied during the night was continued throughout the day with profuse perspiration. The pulse increased in frequency to 120, and respiration 20 per minute, till by 1:30 the following morning, June 20th, or five days and five hours after the first symptoms of the poisoning, he died. Respiration ceased rather abruptly, before circulation, with marked muscular tremor of the whole body.

## Selections.

THE USE OF PROTONUCLEIN.—To the Editor: I am much obliged to you for the space you were kind enough to give my article on Protonuclein and a case treated with that medicine alone. I am still prescribing Protonuclein in my daily practice with increased confidence. I am free to state I have had more

satisfactory results from this medicine than from any one remedy I have ever prescribed, except perhaps quinine in malaria. Having had quite a long experience in the practice of medicine, I trust I am not entirely deceived. Allow me briefly note a case.

Early in the morning of October 15, last, I was called to attend a Mrs. S., aged 30, residing in this city. I learned that she was taken violently sick in the night, six hours before I saw her. Had chills, very high fever, temperature 104, pain and sore throat. On examination I found the right tonsil entirely covered with a thick diphtheritic membrane. About 2 o'clock in the afternoon the exudation made its appearance on the left tonsil, extending back to the fauces and posterior nares. The patient had a hoarse cough and smothering sensation, indicating that the disease was extending to the larynx and trachea. As local treatment, using the powder blower, I covered the diseased parts with Protonuclein Special every four hours, blowing the same up the nostrils, and having the patient inhale the powder as much as possible. For internal treatment, three-grain doses of Protonuclein powder were given every three hours for six days. The effect of this treatment was to check and hold the disease from the beginning. On the second day the membrane began to loosen and thin out, and by evening of the third day it had entirely disappeared. Two days later flakes of membrane were raised from the larynx and trachea, which had evidently formed on the first day. No other medicine whatever was given except a dose of morphine at night. This patient made a delightful recovery, free from the weak and poisoned condition that follows even a mild diphtheria. And this is the *beauty* of the Protoneuclein treatment, convalescents invariably come out fresh, free from defective secretions and poisoned blood.

In this locality the past season, almost every case of malignant diphtheria has extended to the larynx and trachea, and those cases have been invariably fatal—such, no doubt, would have been the result in this case, only for the prompt arrest. I never saw a more violent attack. There were three persons exposed—mother, husband and little son. As preventive they were all given the same internal treatment the main patient was taking. The husband had a very mild diphtheria, which re-

quired a couple of local treatments. The other two escaped entirely. Respectfully.—*A. C. Jackson, M.D., of Goshen, Ind., in the Journal of the American Medical Association.*

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KOLA-KOLOID.—In a late issue of the Prescription, Dr. Johnson calls attention to the use of kola-koloid in a case of melancholia. Although I have never used it in cases of insanity of that nature, I have repeatedly seen a marked effect in the amelioration of those minor cases of melancholy called the "blues." Frequently after a single dose the whole moral atmosphere will be changed. The preparation, one of Theodore Metcalf Co.'s, has a wide therapeutical range, being applicable in a large number of cases where mental or physical exhaustion are prominent symptoms. I have had occasion to test its value in my own case during the past year.

There never was a more comprehensive description of La Grippe than the hibernianism. "It is a disease where you feel worse when you are getting better, and it takes six months to get well after you are cured." Those who have had a personal experience with the disease can appreciate the truth of it.

After an attack of grippe I found nothing in the nature of a tonic and stimulant which acted so beneficially as kola-koloid. This combination has greater efficiency than any other, and what is of great importance, no drug habit is engendered. When the necessity for its use is past it can be discontinued at once.—*W. E. Anthony, M.D., of Providence, R. I., May* 14, 1896, *in Medical Prescription.*

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NEURASTHENIA AND HOW IT WAS CURED.—There has been so much printed lately concerning the cause, pathogeny, and the ultimate results of neurasthenia, that it must be something of unusual value to detain the attention of the busy practitioner. The history of several cases which have come under my care the last two years, may be of some value to others laboring under the dread disease, and to the physicians having them under treatment.

Neurasthenia, as we all so well know, takes on divers and

multitudinous aspects, and it may take months of careful study to diagnose it correctly—even specialists have been known to make mistakes, and how much more are we who practice in the inland towns, away from hospital facilities, liable to false diagnosis. The name neurasthenia was originally given this disease by Bouchut (Afenfeld "Des Neoroses," p. 478.), and as we now understand it, it applies to an exhaustion of the nervous system occurring in persons of a peculiar temperament—the neurotic constitution. The most important factor in this peculiar affection is, as is now generally admitted to be—hereditation—from this type we have children who are unusually precocious—very susceptible to moral and intellectual training, by feeble digestion, imperfect secondary assimilation, and a general failing of the excretory organs. They need but little encouragement to expand into a selfish hypochondriac—they are eternally interrogating these organs, imagining this, that, and the other thing, until they have a well developed case of neurasthenia on their hands, aggravated and assisted to a full development by the mistaken kindness of friends and family. The subjects revel in the consciousness of possessing certain incurable diseases, they never (?) sleep, and they are continually—day and night, dwelling in an atmosphere of nervous tension. They are beset by fears that some of the numerous affections may suddenly break out in some unknowable form—all this is increased by petting, and by foolish parents or some bosom friend—approving and magnifying these symptoms. It is not confined to children or young people—all ages are represented. One of the cases is that of a medical officer in the United States Army. This gentleman was a fellow-comrade of mine in the service, and we both spent years in Arizona and New Mexico, both seeing severe Indian scouting, privation and hardships, in winter's cold and summer's heat, under that one great Indian hunter, General George Crook.

Among the causes, above all in my opinion, are self-abuse, sexual excesses after marriage, dyspepsia, excessive study or attention to business, and the alcoholic habit. The spinal pain and tenderness are not present in all cases, consequently there can be no congestion, and in fact there is no change in the nerve centers, and as this disease has shown no tendency to shorten life, we are forced to come to the conclusion that it is functional in character.

Whether this be true or not, I think the experiences of all physicians who have been called to treat this special neurosis, tend towards it being functional, because the manifold disturbances are intimately associated with a peculiar mental state, and one chiefly—if not wholly—of the psychic sphere.

The physician above mentioned, after years of alleged suffering, and two years of "sick leave," was compelled to resign and go on the retired list. He complained of capricious appetite, pain in the left side near the apex of the heart, torpor of the bowels, pale, anæmic skin, muscles flabby, pulse quick, heart irritable, and subject to attacks of prostration with semi-unconsciousness, the vaso-motor system in a highly mobile state, with chilliness, cold hands and feet. He also experienced great difficulty in reading, with frontal headache, and a peculiar nervous explosion felt in the brain, just at the time of passing from wakefulness into sleep—something not noticed in any of the authorities on neurasthenia. Here symptoms went on from bad to worse, until my friend was a confirmed neurasthenic. In the treatment I, first of all, tried moral management and hygienic influences. So long as the patient is kept at home, the object of solicitous attentions of some slave of a mother, wife or husband, little or nothing can be accomplished. Removal from friends, and subjected to an entirely new set of impressions, is the first and paramount object. Systemic feeding and exercise come next. Electricity comes with favorable notice from some—it failed in mine—as did all other remedies, such as cod-liver oil, iron, strychnia and pirrotoxine, arsenic, nux vom, phosphites, etc.

I had been reading lately of the discovery of Dr. Barclay, of Pittsburg, in the combination of liq. auri et arsenii bromidi—commonly called arsenauro, (Charles Roome Parmele Co., New York). As the last resort I commenced giving it to my friend, being almost as discouraged at the action of drugs as he was. I ordered five drops three times a day, after meals, but finding this in his case seemed to create some distress which he attributed to it, but I think was due to too much "fried oysters," I gave it one-half hour before meals, and at bed time. The effect was rapid and remarkable, the irritability of temper and restlessness was appeased, the action of the heart was lowered in beats and lessened in intensity, and the increased excitability of the nerv-

ous system very much calmed, the eyes brightened, the frontal headache ceased, the digestive organs resumed their almost forgotten functions, the skin lost its pallor, and the blood coursed through the arteries with increased vigor It was but a short time until the neurasthenic was compelled to confess that he not only slept some, but that life seemed brighter with future prospects—the often distressing cerebral symptoms became better, and these improvements continued until now he has quite regained his pristine vigor. This case had been treated by nervous celebrities of national fame with negative results, and I make no claim for a more acute diagnosis than others, but only for the merits of arsenauro, which alone and unaided by other stimuli, caused the cure of this case, which had continued for fourteen years.

The astonishing results of its action in the above quoted case, caused me to try its running mate, mercauro, in a female patient who had traveled the road of all other neurotic cases, going from one physician to the other, and finally in the course of natural events, came to me. Hers was a case of extreme susceptibility to nervous influences—fright, joy, mental emotions of any character caused her to fall into a cataleptic condition and remain so for hours at a time. Knowing the antecedents of this case, and that the father was a gay young lark, browsing in pastures he had no business to be in, I came to the conclusion that this person was a victim of the "sins of the fathers shall be visited upon the children of the third and fourth generation," and suspecting syphilitic contamination, I gave her mercauro. It seemed as she said, to "take hold at once." She regained her usual spirits, the attacks stopped with but one exception, and that was when her husband was inaugurated as a "Menonite preacher." At the installation services she was seized with one. She was afflicted for seven years, the attacks coming on every week or so, but she is now free, having gained thirteen pounds under treatment. —*J. S. Kennedy, M.D., in New England Medical Monthly.*

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SLEEPLESSNESS.—It is unfortunate that the physiology of sleep is not better understood. It is even more unfortunate that what we do know about the phenomenon of sleep is not more

diffused among the profession. How frequently indeed, do we observe physicians who mistake unconsciousness for sleep, and who seemingly regard the goal of the application of their therapeutical measures, as having been reached, when they have succeeded in rendering a tired, worn out, nervous individual oblivious to his surroundings by placing him in a condition which they call sleep, but which is simply unconsciousness. An experience of several years in insane hospital practice presented to the writer, in a very strong light, the enormity of this error and its wide prevalence. It was no uncommon sight to see patients brought to the hospital in an unconscious state, due to the administration of narcotics; opium or morphine being the favorite drug used. One case is worthy of mention here, a male, neurasthenic, harmless, but suffering from the exaggerated mental symptoms, so marked in this disease, was accompanied by his physician to the hospital. The physician stated his reason for coming was that he considered it important to keep his patient asleep, so that he would not appreciate the humiliation of entering the hospital, and, further, that inasmuch as he had not been sleeping well for some time, and that he was now sleeping, he considered the opportunity a good one to let him recuperate. To this end, the physician was at intervals giving hypodermic injections of morphine, and the poor, worn-out, narcotized patient, saturated with morphine, and believed to be asleep, was, as best he could, with his worn-out nervous mechanism, fighting for his life, which his respiration, weak pulse and inhibited reflexes, showed was at very low ebb. This case was not an exceptional one; it was, alas, too common an experience. The physician had lost sight of the very essential principle which should govern our therapy in the treatment of sleeplessness, and that is, that sleep has for its object the repair of the wear and tear of vital processes of life, and to insure sleep we must not interfere with these processes, which we do when drugs are given until sedation results.

There is another thing to bear in mind in the consideration of sleeplessness, and that is, that there is a source of irritation somewhere in the economy, which, if relieved, will be followed by sleep. Again, "an axiom" well worth remembering, is that the more gentle the means employed to induce sleep, the more

natural will be the sleep induced, and the more gentle the means employed, the more careful must we be to select the right time for their use. We believe that Dujardin-Beaumetz was right when speaking of the use of drugs in the treatment of sleeplessness; he said: "That for a drug to be hypnotic, it must imitate the natural condition of sleep, by effecting a lowered intra-cranial pressure, and that drugs which, though bringing about unconsciousness do not lower cerebral pressure, or which increase it, cannot claim to be hypnotics. Opium and morphine are objectionable on this ground. Drug treatment must put the patient in a position to go to sleep in a natural way, and not *put* him to sleep." Sedatives do this, but narcotics do not.

In the use of sedatives we must be cautious and not use them *ad libitum*. The writer in a paper on "Sedatives in the Treatment of Insanity" (1892, Hospital Bulletin of Minnesota), said, "Each case is a 'law unto itself,' and as such requires patient and persistent study ere we commit the folly of giving a hypnotic, when more simple and efficacious methods would produce satisfactory results." You cannot cure sleeplessness by drug treatment; the drugs simply conserve nervous energy and act as valuable assistants to the building-up process, necessary to cure the sleeplessness. Sedatives act, as before stated, by placing the patient in a position to go to sleep, and nature does the rest.

In our experience we have learned to rely upon the bromides, choral, cannabis indica and hyoscyamus as sedatives, which, if judiciously used, bring order out of chaos. The bromides lower the sensibility of the brain, and thus promote sleep. The single salts can be used, but in the writer's experience, where a sedative is indicated in sleeplessness, it is better to combine them, and when there is any excitement, add chloral. Cannabis indica is a sedative which is but little used by the general practitioner, and for the reason that it is misunderstood, misrepresented, and as a result never used as it should be. Clouston, Mathison and Echeverria have taught us their value. Hyoscyamus is another sedative, the value of which is not appreciated, a drug which is endorsed by Budde, Brush, Krafft-Ebing as a hypnotic. Now, these valuable sedatives, when combined, give us a thoroughly reliable and satisfactory agent, with which to treat sleeplessness, and in the writer's experience no more elegant or reliable prepa-

ration is before the profession than that of Bromidia, in which is combined in proper proportion, the bromide of potassium, chloral hydrate, hyoscyamus and cannabis indica. We feel that the profession can always rely upon this combination, and find it especially useful in the treatment of sleeplessness.—*Medical Fortnightly.*

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MOISTURE IN APARTMENTS.—The *Scientific American* offers what is claimed to be a very effective and simple test for the amount of moisture in an apartment. A pound of fresh lime is placed in the room, which is then closed for twenty-four hours, at the end of which time weighing the lime gives a definite idea of the amount of moisture. An increase in weight of one per cent. or more evidences that the room is too damp for living purposes.

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ACUTE GONORRHŒAL RHEUMATISM.—I have a preference for oil of wintergreen and sodium bicarbonate, with general use of alkalies, in the treatment of this disease. The diseased joint should at once be put at rest upon a splint of such proportions that as much comfort as possible may be obtained. Gentle compression over a dressing of mercurial ointment, or an ordinary wet dressing, should be applied by bandage. If the disease seems to be manageable, gentle massage is valuable during convalescence; but if anchylosis is inevitable, it should be assisted by perfect fixation in plaster-of-Paris. The indication is for forced feeding. Meat, eggs, milk and its preparations, besides other simple and easily digested food, should be forced upon the patient every two hours or oftener, and accurate record should be kept of all nourishment taken.—*Dr. Lilienthal, in Boston Med. and Surgical Journal.*

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DR. BLINDERMANN, of Germany, says it is possible to make a differential diagnosis between ulcer and cancer of the stomach by an examination of the blood. The difference is that in cancer there is a steady diminution in the proportion of hæmoglobin. —*Practical Medicine.*

BASHAM'S MIXTURE IN KIDNEY DISEASE.—Professor Hare states that the best mixture of iron for the blood, especially in chronic nephritis, is the old Basham's Mixture. In speaking of kidney diseases he adds that patients with renal troubles ought not to be sent to localities which are largely visited by consumptive patients, as Colorado.—*Dunglison's College and Clin. Record.*

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APPENDICITIS.—I am not always in a great hurry to operate, but I am inclined to wait for the more acute symptoms to wear off, and operate, if at all, after suppuration has taken place, or during the quiescent stage, between the attacks. I wish my voice was strong enough, just here, to call a halt to the men who say: "Operate at once—not this afternoon or to-morrow, but now," in all cases when the disease is recognized.—*McGuire, in the Record.*

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SEMINAL EMISSIONS.—Potassium bromide, says the *Philadelphia Polyclinic*, the popular remedy, is often unsatisfactory; sometimes it even aggravates the condition. A number of physicians have given up the alkaline bromides, preferring hyoscine, administering 1-200 of a grain at bed time. The effect is nearly always favorable, and frequently affords permanent relief. If hyoscyamine is employed instead of hyoscine, it is important to stop short at the point where the physiologic effect of the drug is manifested. One advantage is, either hyoscine or hyoscyamine properly administered can be continued for months without appreciable ill-effects.—*Maryland Med. Journal.*

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STRYCHNIA HYPODERMICALLY FOR THE CURE OF TIC DOULOUREUX.—In a paper by Dr. Charles L. Dana, of New York, read to the Association of American Physicians, in Washington, D. C., May 1, after referring to the rebelliousness of cases of tic douluureux to treatment, said that the method by which seven out eight cases treated by him had been cured consisted in hypodermic injections of very large doses of sulphate of strychnia. The injections, once a day, should begin with one-thirtieth of a grain and be rapidly increased to one-fifth or one-fourth

grain. Patients can rarely bear more than a quarter-grain dose. The large doses had a peculiarly anodyne effect, quieting the the patient for hours like morphine. Usually the injections were discontinued after five or six weeks' usage, but might require repetition once or twice again. On discontinuiug the strychnine, he orders iodide of potassium, nitro-glycerin, or other drugs. Of course, rest in bed with freedom from care are enjoined during treatment. This treatment, begun just two years ago by Dr. Eliot and himself, had been in such contrast in result with that following other methods that he wished to emphasize its value.—*Virginia Med. Semi-Monthly.*

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For Sweating Feet.—Professor Kaposi recommends the following:

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| Sodii Salicylatis | 30 grs. |
| Kali permanganatis | 1 dr. |
| Bismuthi subnitratis | 12 drs. |
| Pulv. talc. q. s. ad | 3 ozs. |

M. et. ft. pulv.

Sig.—Dust on feet and into the stockings and shoes every morning. —*Journal Materia Med.*

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Ovarian Pains.—Dr. Talley frequently calls attention to the value of gelsemium for the relief of ovarian pains which are due to no apparent change in the position or structure of the ovary.

The fluid extract is the preferable preparation, and is best given in doses of from one to two drops combined with a dram of the fluid extract of viburnum prunifolium, this dose to be repeated four times daily.—*Philadelphia Polyclinic.*

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The Second Pan-American Medical Congress.—The Committee on Organization of the Second Pan-American Medical Congress has elected Dr. Manual Carmona y Valle, President; Dr. Rafael Lavista, Vice President; and Dr. Eduardo Liceaga, Secretary, and has announced November 16–19, 1896, as the date of the meeting to be held in the City of Mexico.

The most cordial invitation is extended to the medical profession of the United States to attend and participate in the meeting.

Titles of papers to be read should be sent at the earliest practicable date to Dr. Eduardo Liceaga, Calle de San Andres num 4, Ciudad de Mexico D. F. Republica Mexicana.

The date selected is in the bounds of the delightful midwinter soason when the climate of Mexico is the most attractive to the northern visitor.

The occasion should stimulate the medical profession of the United States to a most cordial reciprocation of the generous patronage accorded the Washington meeting of the Congress by our Mexican confreres.

It should be remembered that the United States is the largest, and in many regards the most important, of the American countries, and that as a consequence more is expected of it than of any other occidental nation. In no particular is this more true than in the maintenance of position in the realm of scientific medicine on the western hemisphere. It is, therefore, simply essential that in this Congress—the most important of all medical congresses in its exclusive, yet broad, American significance—the best thought and the best work of the American profession shall be conspicuous in the proceedings.

The zeal and enthusiasm of the Mexican profession and the active interest of the Mexican Government are coöperating to make the second Pan-American Congress attractive, important, and memorable.

Those who contemplate attending should send their names and addresses at as early a day as possible to Dr. Charles A. L. Reed, St. Leger Place, Cincinnati, that the committee in Mexico may be advised of the probable attendance.

International Executive Committee for the United States: William Pepper (*ex-officio* President), A. M. Owen, A. Vander Veer, and Charles A. L. Reed (*ex-officio* Secretary).

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Treatment of Whooping Cough by Quinine.—According to M. Fischer, quinine has not only a favorable effect in checking whooping cough, but may completely cure it. In two children the number of attacks after the use of quinine for two

days was found to decrease from fifty-six to two each day. At the end of eight days they disappeared entirely. He has treated altogether twenty-seven children, of whom one died the day following its admission to the hospital. Two others could not retain quiniue, vomiting it. In the others the effect was remarkable. At the end of five days there was complete relief from the attacks. In the most severe cases, all that remained of the attack was a little bronchitis. Where whooping cough is complicated by broncho-pneumonia the quinine has also a favorable action upon the latter. Moreover, it stimulates the appetite of the little patients. As to the dose, he gives one centigramme for each month and ten for each year of the child's age, not giving, however, more than forty centigrammes at a time.—*N. C. Med. Jour.*

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Citric Acid in the Treatment of Gonorrhea.—Pellissier (*Aertzl. Prakt.*) reports favorable results in the treatment of gonorrhea with solutions of citric acid. His reason for using it is that it is a parasiticide, and that gonococci cannot grow on an acid medium. He uses it in 1-per-cent. solution injected into anterior urethra six times daily, or by irrigation in strength of 8:1500 up to 8:1000, in both anterior and posterior urethra. He claims that it causes little or no pain and no irritation. He reports 15 cases successfully treated without complications.

The above treatment surely has a favorable point to its credit, as it is an undisputable fact that gonococci cannot exist in an acid medium.—*St. Louis Medical and Surgical Journal.*

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Treatment for Electric Shock.—Dr. D'Arsonville, of Paris, who has made a special study of methods of treating persons injured by electric shocks, proposes the following formula: The person so disabled should be treated like one drowned; in other words, he should be laid upon the back and artificial respiration performed in the way that is ordinarily prescribed. Some further practical advice, however, is given to those who are called at once to the scene of the accident, and at the time when the person is perhaps still in contact with the wires. Of course the first thing to be done is to stop the current or break

the contact. In doing the latter one should not touch the victim on the face or hands, or any naked part of the body. It is better to lift him by the coat-tails or to throw a blanket over him and pull him by this. Nothing that is wet should be thrown upon him, and if his clothes are wet the hands should not be put in contact with them. A piece of dry wood can be placed under the body, and he can then be lifted. The further treatment of the case is the familiar one applied in attempting to restore the drowned. The arms are worked and the tongue is kept drawn out; the body may sometimes be rubbed thoroughly with a cloth or brush in order to increase the circulation of the blood. Oxygen and perhaps a stimulant may be employed.—*Medical Review.*

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ALCOHOL IN FEVERS.—The *Canadian Practitioner* gives the following directions for the use of alcohol in fevers: 1. If the tongue becomes dry, discontinue; if moister, the drug is doing good. 2. If the pulse becomes quicker, harm is being done, and the contrary if slower. 3. If the skin becomes moister the antipyretic effect of alcohol is obtained, and again good is being done. 4. If the breathing becomes easier continue the drug.

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SYMPHYSEOTOMY: A NEW METHOD.—Dr. Edward A. Ayre, (*Medical Record*) employs the following method of performing this operation: Patient at edge of the table, thighs flexed, small male urethral sound introduced to hold the urethra and turn the bladder to the left. Labia minora and clitoris drawn well up to the patient's left, operator's left index-finger introduced into the vagina, pressed against the posterior curve of the symphysis up to the top of the joint; small incision made about half an inch below the clitoris, curved probe-pointed bistoury passed through the wound close against the joint, and up until it can be felt by the index-finger in the vagina above. The pubic bones being V shaped in front, it is easier to follow the line of union than from behind. With due care, no vessels of importance will be severed. The blade of the bistoury is now carefully worked down through the symphysis, the left index-finger still acting as a guide, and keeping the urethra and bladder out of the way. A

small scalpel is better than the curved bistoury, at least at the commencement, but the blunt point of the bistoury is a safeguard against injury to the subcutaneous structures and finger above. There is no comparison between this method and Morisani's and Pinard's. In none of his four cases was there hemorrhage of moment. The after-treatment consists in the use of iodoform gauze, plaster strips around the hips, gauze removed in thirty-six hours, vulva and vagina kept clean by bichloride irrigation; catheterization can be done without risk; in no case was it employed more than twice. Any plastic operation should be postponed.—*Columbus Med. Jour.*

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THE MENOPAUSE.—Dr. Homer C. Bloom, from an examination of 400 cases during the period of six years, concludes (Univ. Med. Mag.) that the normal climateric may be attended by mild or moderately severe symptoms, and that these are usually nervous phenomena; that it is a function that is passing away. It has nothing to do *per se* with originating organic disease, nor is it responsible for the ills of matronhood, but frequently, owing to the fact that the coincident intense nervous phenomena mask other less pronounced symptoms, and because of the common delusion that all conditions at this time are consequent upon the change of life, organic disease is often overlooked. As a physiologic condition nearing its end, there should be no menorrhagia nor increased menses, and any discharge over and above the normal amount demands an immediate digital examination. The length of time in which these women suffer from menopausal phenomena varies greatly. Where the discharge is brought about abruptly, they are longer and more intense; when there is a dodging period covering a year or two, the symptoms are milder and the phenomena cease more quickly. An average of two years covers the duration of the usual symptoms attending the climacteric. The average age when menstruation ceased in this series of cases was forty-three years and eight months. The oldest woman in the series to complete her menstrual life was fifty-four; the youngest to reach this point was twenty-nine; the average puberty was fourteen years and three months, the youngest woman reaching puberty

at ten years, the oldest being a little over eighteen years. The average menstrual life was twenty-nine years and three months. Nationality in these cases establishes the old truth that puberty is sooner reached in warm climates, and that the negro women from the South gave a history of earlier puberty; also that there is no positive relation between early puberty and a late menopause. As to the sexual sense of women after the menopause, the delicacy attendant upon an investigation of such a subject prevents any special deductions, yet it is surprising to learn that this life in some women is not dead at a far advanced age.--*Med. Standard.*

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NEW METHOD OF WOUND TREATMENT.—The *Therapeutische Monatshefte* for February, 1896, contains a report on a new method of wound treatment by Dr. Schleich, which consists of dusting finely grated Formalin-Gelatin, termed by Dr. Schleich, "Glutol," over the wound surface. At the seventeenth congress of Balneologists the author claimed to have treated hundreds of cases of contusions, and in no instance did suppuration take place. Wounds which ordinarily do not heal rapidly, stop suppurating a day after the application of "glutol."

The author concludes by saying that in glutol we possess in powder form a remedy which in contact with clean wounds forms a firm scab, without other disinfectant measures, in the course of a few hours, so that primary stitched wounds are in the shortest time possible covered with a protective layer which prevents infection. The Formalin-Gelatine is further able, by the molecular antisepsis set up by cellular activity, to destroy bacteria present in the tissues, and enables the cellular tissues to rapidly become masters of the situation. The Formalin-Gelatine stops acute purulent processes with great certainty, if after incision and application of the powder the production of tissue and liberation of Formalin vapors is allowed to go undisturbed; in presence of much necrotic material the cell activity can be supplemented by digestion with pepsin-hydrochloric acid.—*Kansas Med. Jour.*

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HOT WATER DOUCHES.—Dr. Baldy teaches that vaginal douches of hot water, as commonly used in the treatment of pelvic

or uterine inflammation, are positively harmful. Hot water used by the patient in the crouching position simply adds congestion to an already inflamed part. To derive benefit rather than harm from the treatment the patient must be reclining and not less than a full gallon of water at a temperature of 105° to 110°F. should be used. Experience teaches that it is impossible to get dispensary patients to observe these rules, and consequently douching is not ordered except for cleansing purposes.—*Philadelphia Polyclinic.—Med. Review.*

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THE TREATMENT OF SOFT CHANCRE.—The Centralblatt für Chirurgie (New York Medical Journal) contains abstracts of two articles on the treatment of chancroid. The first, by Neisser, was published in the Berliner klinische Wochenschrift, 1895. Neisser says that for many years he has observed the best results from cauterization with pure carbolic acid. The application, he says, is absolutely painless; it destroys the floor of the ulcer thoroughly, especially under overhanging borders of skin; it generally cleanses the sore very rapidly, and—a point on which the author lays special stress—it does not set up any artificial hard infiltration, as nitrate of silver does, to be subsequently mistaken for the induration of syphilitic chancre. After the cauterization he applies powdered iodoform and a 2 per cent. ointment of nitrate of silver. Neisser remarks that in four instances lately he has observed sores having the character of soft chancres, occurring three or four days after coitus, which did not heal under this treatment, but after a number of weeks became transformed into serpiginous syphilides; the soft chancre, he says, has become "provocative" of the starting point of a tertiary syphilide, which was promptly cured by iodide potassium. In such cases, says Neisser, one might readily be led to suppose that a reinfection had taken place; consequently mercury should not be given, for it cures primary, secondary and tertiary manifestations alike, and thus makes the diagnosis impossible, while potassium iodide, which cures only tertiary affections, may be used with entire propriety.

The other article, by Frank, which appeared in the succeeding number of the Wochenschrift, seems to be called forth by

Neisser's. Frank uses formalin for effecting the destruction of the ulcerative surface. He says that after twelve hours it appears perfectly dry, as if frozen, and in six days this dry layer is shed and the sore is perfectly healed in one or two days more. Formalin, too, he states, does not give rise to any induration of the surrounding tissues, and the pain occasioned by its application is slight and but of a few seconds' duration. In a few cases he has observed that, after the shedding of the dry layer, the sore showed a moist, glistening surface, without any tendency to heal, but in these cases induration appeared subsequently, together with other signs of syphilitic infection.—*St Louis Med. and Surg. Jour.*

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Consanguineous Marriages in Relation to Disease.—There is ample evidence to show that consangineous marriages play an important role in the causation of disease, and that hereditary diseases are much augmented by such marriages. Among other observers the testimony of Dr. Bemiss is somewhat noteworthy upon this point. He gives an account of 833 marriages between relations, in which he finds the following results: In ten cases of incest with parents, or between brother and sister, 93 per cent. of the offspring were defective. In twelve marriages with niece or aunt 75 per cent. were defective. In fifty-six marriages between blood relations, the issue of blood relations, 53 per cent. were defective. In twenty-seven marriages between double first cousins 27 per cent. were defective. In 112 marriages between second cousins 13 per cent. were defective, while in 125 marriages between persons in no way related only 2 per cent. were defective.

The close breeding-in of animals has long been known to affect deleteriously the qualities of the offspring. Darwin has, for example, remarked that, "with respect to pigs, there is more unanimity among breeders on the evil effects of close interbreeding than, perhaps, in regard to any other large animal." This same observer also relates that a well-known breeder bred a family of pigs in-and-in for seven generations; the number of pigs was reduced at each gestation, and of the offspring thus produced many were idiotic, without sense even to suck, and

when attempting to move could not walk straight, until finally one sow was the sole offspring; she would not become pregnant by her sire, while to a stranger in blood she bred at first trial. With regard to deaf-mutism, statistics show, for the most part, that the closer the degree of relationship between the parents the more numerous are the number of the deaf-mute children born. For example, one marriage between an aunt and nephew produced three deaf mutes. Four marriages between uncle and neice produced eleven deaf mutes. Twenty-six marriages between first cousins produced thirty-eight deaf mutes. Sixteen marriages between second cousins produced twenty-eight deaf mutes. But just in the same way as consanguineous marriages should be avoided, so also should the intermarriage of persons tainted with hereditary diseases be discouraged. Heredity is a most potent factor in the matter of "visiting the sins of the fathers upon the children," by means of which many tainted and diseased offspring are brought forth, and too much care, strictly speaking, can not be exercised in this connection, despite the powerful incentive to overrule all considerations which sentiment at times may create.—*Med. Press and Circular.*

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Iodide of Potassium in the Treatment of Syphilis.—Morel-Lavelle (Revne de Thêr. Mêd.-Chir.) states that all the world admits the powerful influence exercised by iodide of potassium in the treatment of the tertiary lesions. However, he asks the question: Does it prevent the appearance of tertiary symptoms? Is it always indicated as soon as the secondary appearance has subsided? He draws the following conclusions:

1. Mercury must be the base of the anti-syphilitic treatment. Iodide of potassium, however, constitutes a useful accessary agent.

2. The mercurial treatment must be the initial treatment, must be given in sufficient doses and sufficiently long to antagonize all syphilitic manifestations, so that the patient may face the future with a relative degree of security.

3. A syphilitic case in which the mercurial treatment has been abandoned before the end of the second year is one insufficiently treated (Fournier). It is the same if during these two

years the iodides are too often made to take the place of the mercurial treatment, and especially is it true where the iodides have been wholly substituted for mercury—a procedure which, so far as the future of the patient is concerned, is equivalent to almost no treatment at all.

4. Mercury has a prophylactic influence against all of the manifestations of syphilis, as proven, for example, by its happy action in the prevention of hereditary infection in the offspring of syphilitic parents.

Morel-Lavallee criticises unsparingly the so-called methodical or scattered treatment of Fournier. Iodides may be useful, but only as an accessory; it is indicated in the secondary period when the specific treatment causes cephalagia, arthralgia, or pseudo-rheumatism. During the period of transition, sarcocele, unicitis, iritis and psoriasis palmaris develop, but here also the treatment must be combined with mercury. It is the same with the malignant types of syphilis, and especially where there is a premature outbreak of tertiary lesions. The tertiary period can be treated with iodides, especially when there are gummata, dry tubercular syphilides, and ulcerating syphilides. In cases of absolute intolerance of mercury it is obligatory, for want of a better drug, to have recourse to iodides. Iodism must, however, be avoided. In other words, iodine is a therapeutic agent whose action is doubtful in the majority of syphilitic cases, and which must not, at any rate, be considered as a substitute for mercury. —*Medicine.*

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Bismuth Paste for Orchitis.—A thick paste consisting of subnitrate of bismuth and water is the best application for swollen testicles. It relieves the pain and the burning sensation, and the swelling rapidly subsides. It is equally useful for burns and as an application for sunburn and blistered skin.

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There is no antagonist to chloroform so valuable as strychnine given in full doses, and it should be given on the slightest sign of cardiac or respiratory failure.—*Lancet-Clinic.*

A CURE FOR ACNE.—A typical case of acne came under my observation early in 1887. The progress was very rapid. The face became so badly blotched in a few months that the young lady was reluctant to show herself in public. She had received careful treatment from several different physicians for nearly three years prior to the time when she placed her case under my care. I treated her with the galvanic current, applying the negative electrode to the acne in turn, and keeping up the application during three sittings, of twenty minutes each daily. In conjunction with this treatment, I used arsenic in various forms, also adopting a general tonic treatment. Abscesses formed, and were opened as necessary, some requiring repeated incisions. The result of this treatment was favorable in mitigating the symptoms, but was slow in action, and, although persisted in for several years, never produced a cure.

I determined to try Arsenauro; the patient began by taking five drops, three times daily in one-half goblet of water. The dose was increased one drop each day until she was taking thirty-five drops, three times daily in one goblet of water. The dose was increased one drop each day until she was taking thirty-five drops, three times daily, without any head symptoms or any characteristic evidences of arsenic poison. At forty drops, however, there was some giddiness. I then reduced the dose to thirty-five drops, and kept her on that dosage until I considered it unnecessary to continue the remedy. In all she took eighteen bottles of Arsenauro, and has had no return of the malady since the discontinuance of the remedy in the latter part of October, 1895.

Her skin is now fair and smooth, even the scars left from the numerous incisions have become very much less noticeable. I consider the case entirely cured, and give the full credit to Arsenauro.

At no time, no matter what the dosage, was there any symptom of irritation of the stomach. This is an important point, and well worthy of note.

So very marked is the change in her appearance, that many persons have stopped her on the street and asked her what she had taken to cure her.—*J. M. Ingersoll, M.D., of Rochester, N. Y., in Med. Brief.*

TREATMENT OF SUNSTROKES.—The danger of the sunstroke (*Therap. Woch.*, 1895) is in the great hyperpyrexia. This abnormally elevated temperature cannot be removed by the usual antipyretics. Cold baths combined with intensive frictions of the skin and wetting the head with ice-cold water are very efficacious. In addition to this it is useful to bleed. In thirty out of 100 cases of sunstroke one observes convulsions, especially in the serious cases. In the course of elevations of temperature severe headaches are observed. Quinine is forbidden, since it provokes a congestion of the brain, while bleeding is particularly indicated on account of the congestion of the meninges. The skin of the region of the neck must be rubbed. In case of an abnormally rapid pulse veratrum viride and sodium bromide are indicated; on the contrary if the pulse is weak administer ergotin. With injections of ice-cold water into the colon the internal high temperature can be combatted. In case the internal temperature is elevated as well as the external, warm baths and warm injections into the bowels are indicated, even in those cases where in consequence of using cold baths a collapse occurred.—*Phil. Med. and Surg. Reporter.*

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THE TREATMENT OF ALOPECIA.—In the *Journal des Praticiens* of March 28, 1896, Brocq has a brief article upon this subject. He recommends the employment of the following prescriptions:

℞ Resorcin, 1½ grains;
Hydrochlorate of quinine, 3 grains;
Pure vaselin, 1 ounce,

This is to be applied, covering only a limited area at any one application, to that part of the scalp which is devoid of hair, or from which the hair is rapidly falling. If the falling of the hair persists after the employment of this prescription, it is well to incorporate with it five to fifteen minims of the tincture of cantharides, or in other cases the following may be used:

℞ Resorcin, 3 grains;
Hydrochlorate of quinine, 5 grains;
Precipitated sulphur, 30 grains;
Pure vaselin, 1 ounce.

Should either of these ointments produce much irritation of the scalp, so that a burning sensation is produced which is too uncomfortable to be borne, it is well to apply after their removal an ointment composed of 20 grains of borax to 100 of vaselin. After the irritation is relieved, more feeble preparations of resorcin and quinine can be employed. One prescription which may be used is composed of:

℞ Salicylic acid, 5 grains;
Resorcin, 3 grains;
Hydrochlorate of quinine, 5 grains;
Precipitated sulphur, 30 grains;
Pure vaselin, 1 ounce.

And if this produces much irritation of the skin, the ointment of vaselin and boric acid already named may be employed, or one composed of vaselin with one or two per cent. of carbolic acid added to it.

Should the falling of the hair be associated with seborrheic eczema, it is often well to employ a mercurial ointment. One of the best of these is an ointment of the yellow oxide of mercury varying in strength from 1 in 25 to 1 in 10, according to the severity of the trouble. This should only be rubbed upon isolated patches at a time. After it has been employed and an alterative effect upon the skin produced, a prescription composed as follows may be used:

℞ Resorcin, 4 grains;
Salicylic acid, 7 grains;
Pure vaselin, 1 ounce.

Should the condition of the scalp be excessively greasy, the ointment which has been previously employed and the natural oil of the skin should be removed by washing the scalp with a weak solution of ammonium or by using Castile soap and warm water. Under no circumstances should the oily preparations be used continuously without the scalp being cleansed every now and then by some such process.—*Therapeutic Gazette.*

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Fruit as Medicine.—Why for ages have people eaten apple sauce with their roast goose and sucking pig? Simply because the acids and peptones in the fruit assist in digesting the fats so

abundant in this kind of food. For the same reason at the end of a heavy dinner we eat our cooked fruits, and when we want their digestive action even more developed we take them after dinner in their natural uncooked state as desert. In the past ages instinct has taught men to do this; to-day, science tells them why they did it, and this same science tells us that fruit should be eaten as an aid to digestion of other foods much more than it is now. Cultivated fruits, such as apples, pears, cherries, strawberries, grapes, etc., contain on analysis very similar proportions of the same ingredients, which are about one per cent. of malic and other acids, and one per cent. of flesh forming albuminoids, with over eighty per cent. of water.

Digestion depends upon the action of pepsin in the stomach. Fats are digested by these acids and the bile from the liver. Now, the acids and peptones in fruit peculiarly assist the acids of the stomach. Only lately even royalty has been taking lemon juice in tea instead of sugar, and lemon juice has been prescribed largely by physicians to help weak digestion, simply because these acids exist very abundantly in the lemon.—*Pop Sci. Monthly.*

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FUNCTION OF THE PROSTATE.—C. Mansell Moulin has revived the old physiologic doctrine that (*Jour. of Anat. and Phys.*) the prostate is an accessory organ of generation, and as having nothing to do with micturition, and but a secondary connection with the urethra, its function being to add certain constituents to the seminal fluid at the time of its discharge, which serve to arouse and maintain the slumbering vitality of the spermatozoa.—*Med. Standard.*

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A PRIVATE INFIRMARY FOR THE TREAMENT OF CANCER AND CUTANEOUS DISEASES has been established in one of the most accessible portions of Nashville by C. R. Atchison, M.D., Professor of Dermatology, Syphilology and Genito-Urinary Diseases in the Medical Department of the University of Nashville. The institution will be conducted strictly in accordance with the ethics of the regular medical profession, and in direct antagonism to the many forms of quackery so often resorted to by harpies wont to prey upon sufferers from these conditions. As such we sincerely hope that it will receive that support from the regular members of the profession its merits so justly demand.

# Editorial.

## ANTITOXIN IN DIPHTHERIA.

The report of Roux in 1894 of five hundred cases of diphtheria treated by antitoxin served to greatly intensify the interest that had been manifested in this new therapeutic agent for the relief of so greatly and justly dreaded disease. Since then quite a number of general practitioners, specialists and pathologists have submitted the results of their efforts in the treatment of the disease by this remedy. Regardless of the fact that one attack does not serve to develop immunity as in some pathological conditions, repeated efforts have been made to immunize against a disease that does not immunize against itself; and, the analogy believed to exist between antitoxin and Jenner's vaccination has served at least to greatly popularize this remedy with that part of the general public to whose attention it has been brought. In the one we have an immunity, that with fewer exceptions than many general rules, exists for life—while from antitoxin, nothing more than a brief and transitory protection has been claimed by its most ardent advocates.

nual meeting of the Illinois State Medical Society, says:

"Although no crucial experiments have been made to determine the value of diphtheria antitoxin yet the statistics obtained from many sources *seem* to prove that it is capable of greatly diminishing the mortality of this disease. In studying the literature of this subject I find the majority of reports have been from many physicians who have recorded only one or two cases. From a perusal of these one cannot help suspecting that in many instances only the favorable cases have been recorded. The statistics of hospitals are probably more complete and accurate, but the statistics of Health Boards, although more extensive, are likely to be very inaccurate for many reasons."

After considering the subject very fairly, and giving tabulations from more than a dozen prominent hospitals, boards of health, etc., together with a table of 3,040 cases in the joint report of the London hospitals, treated without antitoxin in 1894, and 2,182 in 1895 treated with it, and the results as regards the important sequelæ; a careful examination of which does not serve to greatly stimulate the enthusiasm of the close observer, or to wipe off of the slate the denunciations of the sceptic, he concludes his paper with the following adept "straddle":

"Until more definite information is obtained conservative physicians may well be excused for declining to experiment upon their patients with this remedy. However, the wide belief that it does much good and the comparatively certain knowledge that it does but little harm suggests that our duty to our patients demands that when diphtheria exists we

Dr. E. Fletcher Ingals, of Chicago, in a paper* read at the last an-

* "Orrotheraphy in Diphtheria, *Jour. of Amer. Med. Ass'n., July 4th*, 1896, p. 1.

should administer the antitoxin, if it is desired, but that at the same time we should use such other remedies as have been proven of most value in combatting this disease; but we should hesitate to recommend it as a prophylactic agent.

Antitoxin has certainly not been proven a specific for diphtheria. In estimating its value it should not be forgotten that the bacteriologic diagnosis of this disease is not perfect; that in a large percentage of cases having diphtheritic membrane the Klebs-Loffler bacillus is not found, and also that in a large percentage of perfectly healthy mouths a bacillus morphologically the same is present.

We believe that experimentation in the treatment of diphtheria by serum is in the right direction, and we hope that the enthusiastic friends of orrotherapy may be largely vindicated, yet we cannot search far into the history of medicine to find that very many of the remedies now employed have in the beginning been lauded excessively, and that not a few of those that were formerly supposed to be extremely efficacious have been found to be practically worthless."

The American Pediatric Society, at its eighth annual meeting held at Montreal, May 26th, ult., had a very full report from a committee of collective investigation on this subject. We have not space to give the full report, which will be found in the *Journal of the American Medical Association*, of July 4th, 1896, and was also issued as a supplement to *Pediatrics* for the month of July. However, we give the summary of the report and the action of the Society.

"1. The report includes returns from 615 physicians. Of this number more than 600 have pronounced themselves strongly in favor of the serum treatment, the great majority being enthusiastic in its advocacy.

2. The cases included have been drawn from localities widely separated from each other, so that any peculiarity of local conditions to which might be ascribed the favorable reports must be excluded.

3. The report includes the record of every case returned except those in which the evidence of diphtheria was clearly questionable. It will be noted that doubtful cases which recovered have been excluded, while doubtful cases which were fatal have been included.

4. No new cases of sudden death immediately after injection have been returned.

5. The number of cases injected reasonably early in which the serum appeared not to influence the progress of the disease was but nineteen, these being made up of nine cases of somewhat doubtful diagnosis; four cases of diphtheria complicating measles, and three malignant cases in which the progress was so rapid that the cases had passed beyond any reasonable prospect of recovery before the serum was used. In two of these the serum was of uncertain strength and of doubtful value.

6. The number of cases in which the patients appeared to have been made worse by serum were three, and among these there is only one new case in which the result may fairly be attributed to the injection.

7. The general mortality in the 5,794 cases reported was 12.3 per

cent.; excluding the cases moribund at the time of the injection or dying within twenty-four hours, it was 8.8 per cent.

8. The most striking improvement was seen in the cases injected during the first three days. Of 4,120 such cases the mortality was 7.3 per cent.; excluding cases moribund at the time of the injection or dying within twenty-four hour hours, it was 4.8 per cent.

9. The mortality of 1,448 cases injected on or after the fourth day was 27 per cent.

10. The most convincing argument, and to the minds of the Committee an absolutely unanswerable one; in favor of serum therapy is found in the results obtained in the 1,256 laryngeal cases (membranous croup). In one-half of these recovery took place without operation, in a large proportion of which the symptoms of stenosis were severe. Of the 533 cases in which intubation was performed the mortality was 25.9 per cent., or less than half as great as has ever been reported by any other method of treatment.

11. The proportion of cases of broncho-pneumonia—5.9 per cent.—is very small and in striking contrast to results published from hospital sources.

12. As against the two or three instances in which the serum is believed to have acted unfavorably upon the heart, might be cited a large number in which there was a distinct improvement in the heart's action after the serum was injected.

13. There is very little, if any, evidence to show that nephritis was caused in any case by the injection of serum. The number of cases of genuine nephritis is remarkably small, the deaths from that source numbering but fifteen.

14. The effect of the serum on the nervous system is less marked than upon any other part of the body; paralytic sequelæ being recorded in 9.7 per cent. of the cases, the reports going to show that the protection afforded by the serum is not great unless injections are made very early.

The Committee feels that this has been such a responsible task that it has thought best to state the principle which has guided it in making up the returns. While it has endeavored to present the favorable results with judicial fairness, it has also tried to give equal or even greater prominence to cases unfavorable to antitoxin.

In conclusion the Committee desires desires in behalf of the Society to express it thanks to members of the profession who have cooperated so actively in this investigation, and to Dr. A. R. Guerard for the preparation of the statistical tables."—(Signed) L. EMMETT HOLT, M.D.; W. P. NORTHRUP, M.D.; J O'DWYER, M.D.; S. S. ADAMS, M.D., Committee.

At the close of its presentation, the Society voted to accept the report of the Committee and after a full discussion it was decided to embody its conclusions in the following resolutions:

(1.) *Dosage.*—For a child over two years old, the dosage of antitoxin should be in all laryngeal cases with stenosis, and in all other severe

cases, 1,500 to 2,000 units for the first injection, to be repeated in from eighteen to twenty-four hours if there is no improvement; a third dose after a similar interval if necessary. For severe cases in children under two years, and for mild cases over that age the initial dose should be 1,000 units, to be repeated as above if necessary; a second dose is not usually required. The dosage should always be estimated in antitoxin units and not of the amount of serum.

(2.) *Quality of antitoxin.*—The most concentrated strength of an absolutely reliable preparation.

(3.) *Time of administration.*—Antitoxin should be administered as early as possible on a clinical diagnosis, not waiting for a bacteriological culture. However late the first observation is made, an injection should be given, unless the progress of the case is favorable and satisfactory."

The Committee was appointed to continue its work for another year, and was requested to issue another circular asking for the further co-operation of the profession, this circular to be sent out as soon as possible, in order that physicians may record their cases as they occur through the coming year.

Notwithstanding this strong endorsement, we have quite a number of able clinicians who, by no means, adopt or accept so roseate a view, and we can as yet but suggest as the only correct verdict the trite rendition of a Scotch jury of "not proven." While a very able discussion of this subject was had at the Atlanta Meeting of the American Medical Association in May last, we beg leave to submit in conclusion the greater portion of a paper read in the section on Diseases of Children, by Dr. Elmer Lee, of Chicago, the Chairman of the Section on State Medicines.

"Bacteriologic investigators, in Berlin and Paris, sent word to the United States recently, that diphtheria is curable by a specific medicine. This specific cure is produced as follows: A culture of the germs of diphtheria is injected, day after day, in increasing doses for a long time, into a horse, until it is able to withstand the poison of 250 cubic centimeters of the diphtheria virus, whereas one-tenth of a cubic centimeter of the same virus would be fatal to a guinea pig. After a certain period has elapsed, a quantity of blood is drawn from the jugular vein of the horse, and the serum, after being further treated in the laboratory, is ready to be injected beneath the skin as a cure for diphtheria.

"Ever since the discovery by Tyndall that the atmosphere as well as the soil and the water, is inhabited by life in invisible form, there has been a prolific series of theories concerning germ organisms. It is generally accepted that a constant state of antagonism exists between minute organic life, and it is supposed that preservation as well as destruction of life, is attributable to these germs which are warring with each other. First came the discovery of germ life in nature, followed in due time by the declaration that all diseases are due to the influence of pathogenic germs. The next step consisted of a conception that pathogenic germs must be antagonized by other germs in the preservation of life and the

treatment of disease. The next step in the process is that pathogenic germs, or their ptomaines, are able to be counteracted in their influence upon the life of the human body, by either the same germ or its own ptomaine. It is believed that during the period of inoculation of a horse with the diphtheria culture, a process is going on which is generating a fluid in the animal, that is antagonistic to the disease which it is assumed is caused by the original germ, namely, diphtheria.

"Let us now consider diphtheria from a clinical standpoint. There are two varieties of diphtheria which exist to-day, but, one of which did not exist yesterday. One is true clinical diphtheria, the gross symptoms of which are entirely sufficient for practical diagnosis. The other form is the diphtheria of the bacteriologic laboratory. One is diagnosticated by the clinician, while the other is discovered by the bacteriologist. These two varieties are made necessary by reason of the claims of bacteriology, by which discoveries practical medicine has been both aided and retarded. Aided, by helping to a clearer understanding of the pathogenic and bacteriologic changes during the process of disease, and hindered, for the time being, by throwing a cloud across the pathway of natural and practical therapeutics.

"Diphtheria is a systemic disease with both general and local manifestations. The local manifestations are located principally in the throat and larynx. By some observers the local symptomatology is considered paramount. It is taught by bacteriology that local microbes develop toxins upon the mucous membrane of the throat, and from this source the entire system is infected, whereas the true explanation regards the pathologic changes in the throat as but local exhibitions of general systemic poisoning. The laboratory declaration that a Klebs–Loffler bacillus found in the secretions of the throat establishes *prima facie* evidence that a disease is diphtheria, need not confuse our judgment and interfere with the conclusion previously stated in the foregoing sentence. It is undoubtedly true that suitable nourishment for the growth of germs is found in the throats of children whose general system is impaired with diphtheritic sepsis. The so-called specific germ is found upon the tonsil both in health as well as in disease. Is it, therefore, a reliable means of determining the diagnosis of diphtheria?

"Is the explanation of the false membrane which forms upon the throat, thus interfering with respiration, to be found by bacteriologic inquiry? When the system is impaired, and a determination of the weakened vital forces results in an inflammation of the fauces, there is thrown out upon the mucous membrane a thick, tenacious, glairy fluid, which dries and thickens into a membrane. The inflammatory state of the mucous membrane keeps adding fresh serous discharges, thus augmenting the deposit and ultimately filling the free space of the throat. In this serum the colonies of a variety of germs find normal food for nourishment and growth. Owing to the occlusion of the breathing space, insufficient air enters the lungs and further embarrassment of the health of the child

quickly ensues. Examinations of the blood show an altered relationship among the component parts. Capillary circulation is diminished and congestions arise, both in the structures of the throat and neck, and in other tissues which are adjacent. The physical economy of the vital organs is imperiled and their functions are imperfectly performed. Retention of morbid matter rapidly accumulates throughout the entire system, especially in the capillary and lymphatic vessels. Great efforts are made by the resisting vitality to unload its burden and repair the damage.

"At this time of the pathologic processes there are two therapeutic measures which are imperatively demanded: First, the supply of new force to the tissues by fresh nutrition; and, secondly, aid to the impaired efforts of the organism to remove the morbid and retained matters. Nature is doing all that it can to carry the effete material produced by the disease out of the system through the excretory organs. At this moment what is accomplished by forcing into the circulation a substance which has no natural relationship to the structure of a single element composing the entire body? The system is laboring and panting for life, under the oppression of toxins which it is trying to eliminate. At the very crisis of the greatest strain upon vital resources, a serum which does not belong in the human economy, is strangely added to the fearful load, which is in some cases the last straw that breaks the camel's back. Its use is therefore unphysiologic and absolutely contraindicated. The bacteriologist affirms to the contrary; observe which is the better able to judge, practical clinicians or the ultra-scientist in the laboratory?

"The claims that are seductively held out that cases treated early by antitoxin would recover have utterly failed. The claim subsequently that cases treated by antitoxin recover more quickly than those not so treated has utterly failed to be true. The claim that the death rate would be lessened has proved to be a disappointment. The claim that antitoxin was harmless has been proven to the contrary by many fatal terminations. Judging from the facts concerning the use of antitoxin in practice, does there stand on record to-day one single valid reason, from a clinical standpoint, to encourage the hope of better results in the future than have been attained in the past by other methods of treatment? It is not the purpose to impute insincerity, or lack of intelligent industry, on the part of the profession, concerned in experimenting with antitoxin, but the promises of better results through its use have unfortunately failed to be substantiated.

"The human system, when laboring under morbid influences, needs rather those elements which can add strength and vigor to the vital resistance. By what law or principle in physiology can augmented vital resistance be maintained by the introduction of antitoxin into the system? Has the explanation of the action of antitoxin been satisfactorily given by those who are its sponsors? It is to be conceded that there are cases of diphtheria which, when treated by antitoxin, have seemingly progressed favorably, while there are other cases which have quickly terminated

fatally. The influence of the antitoxin virus is directly dependent upon the condition of the patient at the time of its introduction. If the powers are well maintained, as during the first few days of the disease, naturally the system is stronger and its efforts more effective toward elimination, both of the antitoxin introduced and of the autogenerated toxin. Here is the explanation of the advantage claimed by the early use of antitoxin. It follows, when the system is further impaired its phagocytic action is also impaired, and the chances for recovery by reason of the further introduction of extraneous matter are lessened. What physiologic problem could be more simple? The point is this, that the blood does not need to be further polluted in order to expel the autogenerated products which it already contains. Can any one explain the reaction which takes place in the human living organism when antitoxin is added? There is a reaction, but that the reaction is a curative influence is open to discussion.

"A small amount of morbid matter adjacent to living cell structures is dissolved away by the leucocytes and forced out of the body through the escapes provided by nature. This takes place regularly when the cell is aided by forces which contribute to its vigor. If the vitality is diminished by extensive morbid processes, extraneous matter added to the system, only further weakens the reconstructive agencies which are at work. The theory that sepsis of any kind, already in the system, is able to be neutralized by the addition of manufactured toxins from without, though freely taught, is utterly inconsistent and unreasonable. Can the chemic reactions of the laboratory be successfully repeated in the laboratory of the human body?

"Has horse serum, plus disease, any natural place in the human blood? And the red corpuscles are dissolved by its presence. No material success has ever been achieved by the transfusion of healthy animal blood into the human body for the cure of disease. Transfusion of salt water accomplishes all that is claimed for the process. Now, then, how much the less is likely to be accomplished when an infected animal serum is injected for the cure of diphtheria?

"The blood has lost some of its component elementary conditions. It is thereby altered in character, and when acting through inflamed mucous membranes morbid symptoms are produced, such as are seen in diphtheria. The fluid which patrols the entire body should be strengthened rather than further decomposed and disorganized by the addition of extraneous and poisonous matter.

"The records of the cases treated in the Willard Parker Hospital, of New York City, prove that antitoxin is dangerous and even fatal. The statistics of that hospital establish that the further use of antitoxin is unjustifiable. Extreme interest and effort to know the truth has guided the staff of the Willard Parker Hospital. Dr. Joseph E. Winters, of New York has sought diligently to establish the value of antitoxin, but the clinical experiences have forced him unwillingly to condemn its use. Is it safe to neglect the warning of such an experienced clinician and medi-

cal teacher? Professor Lennox Browne, of London, patiently and earnestly sought for clinical reasons to further the interests of antitoxin. His conclusions are emphatic and pronounced against it. Dr. Welch, of Philadelphia, also deprecates the use of antitoxin, basing the conclusions upon an extensive experience in the Municipal Hospital of that city.

"Health department statistics of New York are cited in Chicago to the advantage of antitoxin, and Chicago statistics are published in the interest of antitoxin in New York. Health department methods of collecting information must be taken with allowance for accuracy. Previous to leaving Chicago a culture was made of the tongue of the office boy and the tube left at the city health office. The answer received stated that the case was one of true diphtheria. In fact, the boy was not ill at all. Provisions were immediately made by the department to fumigate and otherwise annoy the family at the boy's home. Is it not easy to be seen that the enthusiasm and overzealous interest of the medical corps in the employ of cities may bring to the notice of the health departments cases similar to the one cited? Such reports go on the records and contribute toward the statistics which are sent broadcast. The statistics very quickly become confused, and their power for usefulness is absolutely *nil*. Unquestionably large numbers of cases which have been reported to be diphtheria and cured by an injection of antitoxin have been of the bacteriologic class.

"It was recently stated to me, upon good authority, that the sales were falling off rapidly and an early termination of the demand for antitoxin was not far off; also that offers to purchase antitoxin upon most advantageous figures had been declined because of the fear of pecuniary loss. Thus the straws point the way the wind blows."

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TRUE SALICYLIC ACID AND SODIUM.—The Salicylic Acid of Commerce made by art and its compounds differ very materially from the product of nature's wonderful laboratories. The investigations of Professor Latham, of Cambridge, England, are confirmed by Drs. Charteris and Macanna, of Glasgow, and warn us against the use of the former; their conclusions being that they are slow but certain poisons, produce symptoms closely resembling delirium tremens, are dangerous to human life, patients become delirious, have to be closely watched. They retard convalescence, and should not be administered internally, however much they may have been dialized and purified.

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IF YOU WANT TO PLEASE your wife or daughter get a *New Home Sewing Machine*. There is none in the world that can equal, in mechanical construction, durability of working parts, fineness of finish, beauty in appearance, or has as many improvements as the *New Home*. Among its many excellencies is its automatic tension, double feed, alike on both sides of needle. A peculiarity belonging only to his machine, driving

wheel hinged on adjustable centres, thus reducing friction. Write to the *New Home Sewing Machine Company*, 28 Union Square, N. Y., for circulars, if you are not satisfied with this brief statement. Having tried this machine we can most heartily commend it.

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SANMETTO IN KIDNEY AND BLADDER AFFECTIONS AND ENLARGED PROSTATE.—J. Patterson Lewis, M.D., Member of British Medical Association, Alma, Dalbeattie, Scotland, says: "I have used Sanmetto in a large number of cases of kidney and bladder affections with invariably good results. In several cases of old men, with enlarged prostate, unable to keep to their bed for only an hour or so during the night, it has given an amount of relief I could not have believed, seeing the supposed fixed cause, enlarged prostate; reducing their getting out of bed to one, two or three times during the night."

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SUMMER DIARRHŒA.—In the large class of summer diarrhœas of children and adults, with griping in the bowels and flatulence, the use of listerine, in doses varying from ten drops to a teaspoonful (with or without water), has a most salutary and pleasing effect.

It can be administered at short intervals after eating, as soon as regurgitation, distension or acidity occurs. Its action in arresting excessive fermentation is prompt; besides, it exercises a decided sedative influence on the mucous membranes of the stomach.

The Thymol, Menthol and Boracic Acid which, with the quota of alcohol necessary to their proper admixture, form the principal elements of listerine, lend to this compound a special value in this class of cases.—*New York Medical Journal.*

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EUROPEAN ENDORSEMENTS.—The *London Lancet* of March 28, 1896, says editorially: "Antikamnia is well spoken of as an analgesic and antipyretic in the treatment of neuralgia, rheumatism, etc., etc. It is not disagreeable to take, and may be had either in powder or tablet form, the latter being made in five-grain size. It is described as not a preventive of, but rather as affording relief to, existent pain. By the presence in it of the amine group it appears to exert a stimulating rather than a depressing action on the nerve centres and the system generally. If this be so, it possesses advantages over other coal-tar products."

The concise endorsement of the *Edinburg Medical Journal*, which appeared in the January issue, is equally interesting: "This is one of the many coal-tar products which have lately been introduced into medicine in Scotland. In doses of three to ten grains, antikamnia appears to act as a speedy and effective antipyretic and analgesic."

DURING THE past thirty-five years "Vin Mariani" has gained more ardent admirers among the medical profession throughout the world than any other preparation, and justly so, as there has never been a disappointment from its use. This is specially noteworthy on account of the attacks made from time to time against Coca (generally from interested parties), and on investigation it is shown that the many so-called Coca wines are nothing more than shameful mixtures of cheapest, inferior wines, and variable solution of Cocaine unscrupulously sold as Coca wine, simply for mercenary purposes.

It is in this manner that really useful drugs are brought into discredit.

M. Mariani has gathered the written opinion, clinical notes, etc., of many thousand physicians from all parts of the world, showing the universal high opinion of practitioners who have subjected "Vin Mariani" to thorough test.

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THE AMERICAN MICROSCOPICAL SOCIETY will hold its nineteenth annual meeting in the new Carnegie Library Building, Pittsburg, Pa., Tuesday, Wednesday, Thursday and Friday, August 18, 19, 20 and 21, 1896. A hearty welcome will be extended to all interested in the microscopical sciences. Applications for membership and titles of papers to be read at the meeting should be addressed to A. Clifford Mercer, M.D., President, Syracuse, N. Y., or to Wm. C. Krauss, M.D., Secretary, 382 Virginia Street, Buffalo, N. Y.

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I AM NOT in the habit of giving testimonials, and certainly would not do so until I had given the remedy a thorough and satisfactory trial. I have prescribed Cactina Pillets about five years, and I find them to be a very valuable preparation, much better than the modest claims made for them. O. M. BROWN, M.D., Hockley, Texas.

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## Original Communications.

### SOME RECENT ADVANCES IN MEDICINE.*


J. A. WITHERSPOON, M.D.,

Professor of Practice of Medicine and Clinical Medicine in Vanderbilt University.


*Mr. President and Fellows of the Academy:*

Since being appointed to write upon this timely subject and feeling duty bound to comply, I shall leave the president to make the "amend honorable" to the specialist of the profession for presuming to claim any progress with the mother which is not directly and wholly due to the children.

I would not be understood incorrectly, to mean that general medicine has stood quiescent in the great march of progress, for in my humble opinion she grapples with the problems of life itself, and solves the philosophy of mysterious disease.

Her silence can be attributable to that modesty born of conscious power attained by mature and thoughtful years of consci-

*Essay read at the Nashville Academy of Medicine.

entious and laborious observation coupled with careful and painstaking, scientific research. The most prominent and important advance has been in lifting her head above the dark clouds of ignorance and empiricism, and planting her foot upon the firm rock of rational medicine.

This wonderful and beneficial transition has been brought about by thorough study of the etiology, pathology and differential diagnosis of disease. We have but to recall a few years and look upon the decimation of thousands by contagious and infectious diseases, but as soon as they were found to be of microbic origin, and the life history and environments necessary to their growth and development became known, the heavy hand of progressive preventive medicine was laid upon them, and with the power which comes of knowledge those scourges have been stamped out so completely that the places where they held high carnival, blanching the cheeks of the brave and destroying more than war, so suitable to the development of them, knows them no more forever.

Close study as to the cause and methods of contagion of yellow fever has enabled us to keep it in its normal habitat. The discovery of the comma bacillus of cholera, and its life history, has completely closed the gates of entrance to its terrible ravages, 1873 being the last epidemic appearance of that disease in this country.

Possibly, one of the greatest advancements made has been in the proper classification and differentiation of the fevers; and a close study of their cause and modes of transmission, together with their pathology, has made typhus fever almost unknown. Typhoid fever, the most universal of all of them, still remains with us; but the discovery of the bacillus typhosis of Eberth, and how it enters the system, makes it possible for us, by pure water, clean milk, perfect drainage, and constant teaching of the laity the great principles of cleanliness, to eradicate it forever. In no disease is its history and pathology better known, together with the essentials of its prevention, so that an epidemic of this fever is a reflection upon those who have the hygienic and sanitary laws under their control.

I am sorry to say that the treatment of this disease has not kept pace with the knowledge of its cause, pathology and diag-

nosis. The positive proof of its microbic origin has also fixed the law of specific course, thereby rendering all so-called abortive treatments absurd, and conclusively proving that the conservation of nature's vital forces until it runs it course is the rational treatment. Such wild claims as the "Woodbridge treatment" are not advances, but are misleading delusions, with nothing to recommend them but the enthusiasm of the author in his ambitious desire to suggest something new.

That the antiseptic plan of treatment is a failure in this disease, we have but to refer to the pathology to show it is not rational. If these so-called intestinal antiseptics can destroy pathogenic germs in a disease where the germs have already penetrated the coats of the bowels and entered the lymphatics, why have they failed in cholera, where the comma bacillies thrives, grows, procreates and produces its pathological changes in the bowels? Again, the proven impossibility of destroying germs experimentally in the bowels of nearly 30 feet in length by medicine taken by the mouth in safe doses, is quite sufficient to stamp this as a fake.

When these advocates learn what it means to abhort a disease and study more closely the course and duration of mild typhoid fever, and then present their cases in a tabulated form, giving charts and methods of diagnosis, and all of the scientific means of differentiation, then, and not until then, can they appeal to the intelligence of scientific observers and students of this disease.

Since Laveran discovered the plasmodium of malaria, and other observers have thoroughly proven it to be the cause of malaria, and have made its presence a positive sign which may be used in differentiating it from typhoid, we, of the South, can reap great benefit by taking advantage of this advancement in differentiating these common fevers without the so-called therapeutic test, frequently adding fuel to the fire of a typhoid fever with quinine before we can determine what we have.

Another very interesting fact has been determined, is that this plasmodium assumes different shapes in the several types of malarial fever, making it possible to thus, by blood examination, say which type we have, and also the fact that the divisions of an intermittent into quotidian tertian and quartan are due to a difference in the time of the cycle of sporulation.

One of the crowning achievements of modern medicine has been in utilising fluids of the body to combat morbific agents. Since Nuttal, in 1888, clearly demonstrated the protective power of blood serum against bacterial invasion, and Behring and Kitasato, in 1891, utilized it in the treatment of diphtheria, and with such marked success, both as a preventive and curative agent, any physician who neglects its use in so fatal a malady would be considered by some guilty of gross negligence or unexcusable ignorance.

Following in the footsteps of these great advocates of the antitoxine treatment, experiments have been made upon lower animals and human beings sufficient to warrant the belief that we will soon have an effectual weapon against tetanus, glanders, leprosy, and many other hitherto incurable diseases. Experiments in typhoid fever have been made with the serum of convalescents and immunized dogs, but they have been too few to develop an opinion. But in tuberculosis, the great monarch of death, who claims, and correctly so, more victims than the wars of all nations combined, entering as an uninvited guest with stealthy and unrelenting tread, the gilded palaces of the rich and the poverty-stricken hovels of the poor, having dominion over all nations of the earth, sparing neither young, old, rich, poor, white or black, man or beast, since Koch's discovery of its germicidal cause, and his suggestion of the tuberculine treatment, which has disappointed an eager profession, yet it has brought about a condition of hopeful unrest; and able investigators have ever since been experimenting until now serum from immune animals is holding out brilliant promises of success.

Whether it be the long-looked-for specific combative agent or not, it is a step in the right direction. The usefulness of such agents as tuberculocidin and antiphthisin, which are unfortunately under the ban of suspicion, as the names have been patented by Klebbs and Von Ruck, are very much impaired, yet the report of the Parish Medical Society of New Orleans shows that they have merit in properly selected cases. Von Ruck reports 182 cases of consumption in all stages treated with these agents with complete recovery in 32 per cent.; arrest and marked improvement in 30 per cent.; and some improvement in 16 per cent.

Now with all these favorable results following discovery of the microbic origin of disease, is it too much to hope that in the near future a therapeutic battle will be fought against the pathogenic bacteria, which infect and destroy human life, and the victory be won by nature's own weapons of protection?

The advances made in the line of differential diagnosis have been wonderful in the last few years, and deserve especial mention. The day when a physician can feel of the pulse and look at the tongue, and assume a Solomonic countenance and "prescribe drugs about which he knows little for diseases of which he knows less" has fortunately, for the profession and humanity, passed away; and he who examines thoroughly and weighs well the significance of symptoms and physical signs, as produced by thoroughly understood pathological changes, is master of the situation and becomes the real benefactor of mankind.

The perfection of the methods of differentiating disease in the last few years has been truly marvelous. Auscultation, percussion, palpation and inspection have largely taken the place of useless questions, during the answers of which many patients diagnose their disease, and I am sorry to say their diagnosis has been frequently accepted and treated accordingly without further investigation. The use of the microscope as an invaluable aid in diagnosis is now admitted by all, but its use is not as universal as it deserves to be. Its employment in genito-urinary diseases, in sputa examinations, in blood diseases, in tumors, in the specific fevers, and many other conditions, throwing the clear light of precision upon many obscure conditions, at once makes it one of the most valuable advances in this department of medicine.

The science of chemistry has also contributed largely to the advances of differential diagnosis, whether it be in the detection of sugar or albumen, or more recently the peptones of cancer in urinary analysis, or the contents of the stomach, the hyperacidity of gastric ulcer, or the absence of free acid in gastric cancer, it makes itself absolutely essential to thorough work.

I may mention in this connection the advances made in diagnosing diseases of that organ which the Americans have the distinction of abusing more than any other civilized nation—it is needless to say I refer to the stomach.

The recently accepted doctrine, and I think correctly so, is

that faulty muscular action is more to blame than disordered secretion in dyspeptic troubles, has revolutionized the treatment of these cases. The utility of the test-meal, and measuring the capacity of the stomach either by gas, water or the rubber bag, are methods that go to make up a careful and correct diagnosis. Pepsins and other ferments are now used only as weak assistants in the treatment; but correct diet and perfect mastication of food with good teeth, and drugs that tone up the muscle and nerve supply of that organ, together with lavage, which is possibly the sheet anchor, acting by stimulating muscular contraction, thereby enabling the stomach to free itself of the food and acid mucus, and having marked power of increasing the gastric juice, allowing it to come in contact with the foods, are some of the latest methods of diagnosing and curing this most universal disease.

To Fenton B. Turck, of Chicago, the profession owes many late suggestions and instruments in the treatment of stomach troubles, such as the cable with a sponge attached, by which he produces revolutions in the stomach, thereby measuring the capacity of the organ as well as sweeping its walls of the adherent mucus which clings so tenaciously to its interior in chronic gastric catarrh. This instrument he calls a gyromele. Another very ingenious device is the stomach needle-douche, which is a double canula, through the short one he sprays the stomach and the recurrent flow is carried out through the long one. This will prove an invaluable instrument in stimulating the circulatory and muscular action of the stomach, and promises fair to cure many hitherto incurable cases of chronic gastritis.

Dr. L. Bremer, of St. Louis, has recently conclusively proven the possibility of an accurate diagnosis in diabetes mellitus by testing a drop of blood; this he does by eosin and methyline blue; the reaction, if sugar be present, being a bluish-green color. This is important—in those cases where the sugar is, by treatment or otherwise, absent in the urine.

I hope I will be pardoned for suggesting that the multiplicity of pharmacentical preparations with which every doctor's office is flooded is pernicious in its influence, and seriously retards the development of that branch of medicine. Every little 2x4 pharmacist, through mercenary motives, arrogates to himself the

right to dictate what treatment we shall use, and even goes so far as to write our prescriptions and tell us in what diseases to use them, having filled them for us before we ever have the case. I desire to state that such practices contract the medical man into a mechanical subordinate, if followed for any length of time, and the sooner we throw off the yoke the better for us and our patients.

But out of the two bushels of chaff some grains of wheat have been found. I refer to the thyroid extracts. There can be no doubt but that they have a legitimate place among our useful remedies. What ever may be the results of trials of bone-marrow in anemia, the suprarenal extracts in Addison's disease, or nucleins in anemia and nervous affections, and I may say they are promising, we must concede that in these diseases produced by loss of function of the thyroid gland, that in thyroid extract we have as much of a specific as quinine in malaria, or mercury in syphilis. In such diseases as enlarged thyroid gland, or goitre, inherited or acquired myxedema, or sporadic cretinism, where the whole body is a shapeless, repulsive mass of hideous deformity, with complete lack of mental development, and in from two to three months' treatment see the transition to perfect physical and mental perfection is truly wonderful. But allow me to state that in exaphtholmic goitre they do harm, and should never be used. The recent conclusion that the function of these ductless glands was some internal secretion which had directly to do with the tissue metabolism of the body, would seem proven by the results obtained by this treatment.

I cannot close this paper without emphasizing the great progress made in preventive medicine. Following the discovery of the microbic origin of disease came the necessity of revolutionizing our methods of living. This reform must begin in the homes, and every physician must preach the gospel of cleanliness, and teach the people the hygienic laws which will decrease sickness and death and increase the sum total of human happiness. Boards of health have, by intelligent and concerted action, almost eliminated the great epidemic diseases as factors in our mortuary statistics, the accomplishment of which has proven beyond a doubt the possibility of completely eliminating all infectious diseases. If a sanitary committee of intelligent medical

men existed in our fair city, empowered by the strong hand of the law to act, demanding thorough drainage, perfect cleanliness, inspection of all articles of diet consumed, especially the water and milk supply, typhoid fever could be eliminated. Scarlet fever, diphtheria and the like could be controlled; and if the people were educated as to the infectious nature of tuberculosis, its modes of transmission by the dried, infected sputa, which is daily expectorated upon our streets, in our public halls and places of worship, we could largely modify this disease.

All these things have been proven by advanced progressive medicine, but they are Utopian dreams so long as these much-needed reforms are in the hands of politicians and ward bummers, whose only sense of duty seems to be to the clique or corrupt ring to which they owe their political birth, that they may perpetuate their term of office. To suggest a method by which this boon to suffering humanity can be accomplished is like shaking a red rag in the face of an infuriated bull, and why? Because "these cattle" would be shorn of some of their power while they are incompetent to perform their proper duties intelligently or successfully.

In conclusion, allow me to congratulate general medicine, the great mother, upon the gradual, but sure, restoration of her legitimate territory which has been confiscated by her children, the specialists. It has been with maternal pride that she has watched her lusty sons in the exuberance of youth take from her all the possessions inherited or acquired by hard labor, knowing full well that boys with their first trousers thought themselves bigger than their "daddies," and that in the fullness of time they would return like the prodical son, foot-sore and weary, asking forgiveness for their folly and beseeching her to take them again under the protection of her strong arm of conservatism. A family reunion much to be hoped for, and for which the devout prayers of the long-suffering people should be offered.

I would not be understood to reflect upon the truly educated and conservative specialist, who first familiarized himself with general diseases, and perfects himself in one department and practices it for the good of humanity; but to that class who enter special fields unprepared, and without judgment, who find me lesion in every case they see, and who insist in their ego-

tism to limiting the work of the general practitioner to night calls, measles, whooping-cough and constipation, and consider it an honor to him to be allowed to shake the tree while he gathers the fruit. To add insult to injury he undertakes a system of education by reading bombastic advertising papers, entitled: "What a General Practitioner Should Know About His specialty," until we wonder how long we will be afflicted with these pathogenic microbes who retard progress and reflect upon true and honorable specialism. How long is this "spectacle" fad going to last. Even the negro coon must have them to see how to walk the streets in daylight, when for time immemorial he has been noted for the keeness of his vision, being able to do a cake walk by the dark of the moon, and following with unerring sight the uncertain meanderings of the opossum on the darkest night. When will the day come when a dozen healthy ovaries, cease dangling from the crown as jewels of honor, science and skill. When will Alexander's operation, Hystorectomy for cancer uteri, which has already involved the lymphatics; operations upon slight tears of the perineum and cervix and other useless and dangerous procedures cease. God speed the day. To Dr. J. William White, the women who have so long suffered mutilation, hoping for relief which they rarely receive, owe a great deal. In his suggestion of castration for hypertrophy of the prostate he has selected the wrong sex, and such a wail of disapproval will spread over the land that a reaction will save the healthy ovaries of many women.

Now, when all these reforms have taken place, then and not till then, will general medicine regain her long lost rights, and humanity may exclaim with the seer of old: "Sound the loud tymball o'er Egypt's dark sea; Jehovah has triumphed and the people are free."

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# THE PRESENCE AND SIGNIFICANCE OF BACTERIA IN AIR, WATER AND FOOD, AND THEIR RELATION TO HEALTH.*

BY WM. D. SUMPTER, M.D., NASHVILLE, TENN.
Prof. of General, Descriptive and Surgical Anatomy and Miscroscopy in the Medical Department of the Umiversity of Tennessee.

It was in 1675 that Leuwenhoeck, the Dutch naturalist, observed micro-organisms in faeces and putrefying matter, by means of his magnifying glass. The crude lens did not suggest that still smaller organisms, endowed with life and function, would be revealed by the improved microscope of the subsequent centuries. In marked contrast to his larger fungi, yeasts and moulds, there have been found and demonstrated to the world plants belonging to the class of fission fungi, minute rods called "bacilli," one micron or 1-25,000 of an inch in diameter, and only two or four times as long; also small, round bodies called "cocci," varying from 1-25,000 of an inch, more or less, in diameter.

For nearly a century the discovery was almost entirely ignored, but in 1773 Muller attempted to classify the organisms found in impure water. In 1859 Davaine discovered that bacteria are plants, and gave them their place in the vegetable kingdom; also demonstrating their etiological relation to specific diseases. It remained for Lister, Koch and Pasteur, with others, to prove what has been called the germ theory a misnomer, and establish what is now known as the science of bacteriology.

Notwithstanding repeated conclusive proofs, the profession was slow to acknowledge the importance of bacteria, but so thoroughly have our colleges, text-books and journals directed their attention to the subject, explained pathology hitherto obscure, that the physician who is loth to accept

*Read before last meeting of the Middle Tennessee Medical Association.

bacteriology as a scientific study practices medicine under the cloud of prejudice and is not in keeping with the progress of the times. The idea of spontaneous generation, in its absurdity, has been disproved, and we understand fully the reproduction of bacteria, as we do other plant life, the bacilli multiplying by fission, and producing, in some instances, seed or spores as distinctly as the higher vegetable kingdom; the cocci reproducing themselves by fission only.

So exact has been the study of each organism that 489 distinct varieties have been described.

As the poppy in the higher vegetable kingdom produces opium and the strychnos nux vomica, strychnine, so some bacteria form definite poisons or ptomaines. This fact has led to the erroneous belief among many of the profession and the public that bacteria are all pathogenic and man's greatest enemies, while of only relatively a small number this is true, as the majority of bacteria are non-pathogenic and harmless. They may well be called the world's greatest benefactors.

To a class called saphrophytes is imparted the power of converting dead organic matter into its component parts, carbon dioxide, water, ammonia, etc., to be used as food by the higher plants. Without bacterial flora all vegetable life would cease, and animal life dependent upon it would find no means of subsistence. To the saprophytic bacteria, then, all life owes its existence.

Parasitic bacteria are pathogenic, as are some of the saprophytes, but most of the latter are concerned in the decomposition of dead matter.

Wherever life is found, bacteria are present, and, as putrescible matter increases, they increase. So density of population demands attention to sanitary surroundings. The wide distribution of germs, their number and relation to health have all been carefully studied.

We will first consider the bacteria of the air. No air is free from them, except that above the snow line upon mountains or at sea beyond ships and lighthouses. Air at

rest contains few or no bacteria, but such a condition seems impossible when we consider how the most insignificant breeze may hurl into the air millions of them. They are seldom isolated in the air and are usually found clinging to particles of dust, and by this means carried into the atmosphere.

In rooms they are more abundant than in streets, and in cities more than in the country, where grass keeps the air, to some extent, free from dust. Rainfall decreases the number in the air and increases the number in the water. The purity of the atmosphere depends upon the purity of the soil. Bacteria in the air are mostly cocci and mostly saprophytes.

The number necessarily varies much from less than a hundred to thousands to the cubic centimetre, according to the amount of dust held in suspension, and has no special significance, unless the bacteria are pathogenic. We shall not consider the non-pathogenic bacteria. There are quite a number of diseases which are supposed to be transmitted to us by air, as scarlet fever, small-pox, diphtheria, etc.

As the specific germs of these diseases have not as yet been found in the air, we will consider those which have been found as causes of diseases and cultivated, e. g., streptococcus pyogenes, staphylococcus pyogenes, bacillus influenzae and bacillus tuberculosis. The germs of the air, of course, are most likely to affect the lungs. The majority, however, do not pass the larynx, and, if they do, are usually deposited in the smaller bronchi, at the junction of the tidal and complemental air. Of all the pathogenic germs in the atmosphere, the bacillus tuberculosis is the most virile, and should demand our attention, especially, as one-seventh of the human race dies of tuberculosis.

The relation of germs to health always depends, to a great extent, on the condition of the tissues, and impaired vitality, due to the lack of nutrition, and unhygienic surroundings, which pre-dispose the tissues to the action of the smallest number of bacteria. Their entrance into the lungs

is especially favored by the destruction of bronchial epithelium, as after bronchitis, from any cause, such, for example, as measles; by tenacious mucus, rendering the secretions less easily expectorated; by pleuritic adhesions, deformed thorax, which, for the same reasons, pre-dispose the lungs to infection by germs. As bacteria are usually deposited in health in the smaller bronchi, they are no doubt often expectorated or destroyed before they can produce their injurious effect. That the lungs are more easily infected than the alimentary canal is shown by the experiment that when sixty-six guinea pigs were made to breathe dust containing spores of the bacillus anthracis, fifty died of athrax, nine of pneumonia, and seven lived. By the mouth, double the amount for each was given in food to thirty-three guinea pigs, and only four died. Knowing the danger of inhalation of pathogenic germs, too much importance can not be attached to disinfection of all contaminated matter and preventing their final conveyance to us in dust.

Water has given us the best means of studying bacteria, and no water, as we find it, is free from them. Artesian wells and deep springs are nearly so. As in the air, most of the bacteria in water are saprophytes, and non-pathogenic. When bacteria are absent, as in sterilized fluids, fermentation does not take place. For multiplication in water, germs require a certain amount of organic matter, although some require very little, and can reproduce themselves even in distilled water. Very few, however, have this power. The number of bacteria in water usually indicates a proportionate amount of organic impurity, and is relatively small or great as organic matter is present. The majority of bacteria of water are bacilli. Currents of air, rains, sewers, etc., constantly contribute an abundance of them to water. In all its forms water contains bacteria. Snow from Norway glaciers has been found to possess quite a number of them, and hail usually contains from 729 to 21,000 to a cubic centimetre. Ice, unless manufactured, always contains bacteria varying from less than 100 to

14,000 to a c. c. Hudson River ice usually contains about 398 to a c. c. Hydrant water has from 200 to 4,000 or more, and may even block water pipes. This can be readily understood when we consider the rapidity with which bacteria divide. Complete division, with the offspring becoming parents in from ten minutes to an hour or more, renders this possible. Supposing a bacterium occupies an hour in division, in twenty-four hours, if nutriment were favorable, there would be more than 16,000,000 germs produced, and in two days 281,000,000,000. Reservoirs are often several feet deep in bacteria. The number of bacteria in river water may be judged by the following examinations: The water of the Seine, before reaching Paris, contained 1,200 to each c. c. At St. Denis, after receiving the sewage water, the number was found to be 200,000 to a c. c. The Spree in Berlin, above the Panke, contained 940,000 to the c. c.; below the mouth of the Panke, 1,800,000. The Main, above Wurzburg, contained 520; below, 15,500. The Potomac, estimates being made at different months of the year, contained from 144 to 3,774 to the c. c. Lake water has fewer bacteria than river water. Sewers in Paris have 6,000,000 germs to each c. c. of water; those of London have 7,500,000.

As with bacteria of air, enumeration of germs of water has given results mostly of scientific interest, and no additional process of practical value. We conclude, by experiment, that water containing less than 100 bacteria to a c. c., and filtered usually does, is presumably uncontaminated and safe enough to recommend. Five hundred present must be looked upon with suspicion, although all may be non-pathogenic and the water practically pure. One thousand or more to a c. c. indicates contamination, probably by surface water, and such water should be rejected or filtered. Yet, with one glass of pure spring water, we carry, doubtless, more germs into the alimentary canal from the buccal cavity than would exceed the most impure river water. Fortunately, however, most of these are harmless.

Eighty-seven varieties of bacteria have been found in

water near Vienna. The non-pathogenic saprophytes, no doubt, are food to our bodies, as the higher vegetable kingdom. The pathogenic ones demand our attention because of their irritation to the alimentary canal and the system in general, and wounds infected by water containing them. Among the pathogenic bacteria in water in our country stands first the bacillus typhosus, very common and most resistent. Then, in abundance, we find the staphylococcus pyogenes aureus, the streptococcus pyogenes, the bacillus coli communis and the dreaded bacillus tuberculosis. In the struggle for existence the non-pathogenic germs usually found in water often crowd out the pathogenic bacteria, so that the greater portion die or their reproduction is prevented, thus favoring good water.

Bacteria of food are usually very abundant, as every object of nature is covered with them, and articles that serve for our pabulum are equally good for the development and sustenance of the microbe. Milk, although sterile from an undiseased udder, always contains bacteria, as we find it in use, being an excellent nutrient material. Contamination from desquamated epithelium, of the milkman's hands or cow's udder, dust raised in a hotbed of bacteria, a stable or shed, easily explains the number found in milk. Water used in washing the hands, udder and receptacles, to say nothing of the amount added to increase the quantity of milk, can convey every form of bacteria that the water contains. Milk from cows in clean and well-kept stables has been found to contain from 350 to 30,500 bacteria to each c. c. The average from several samples from the stables of the suburbs of Boston was 69,143 to the c. c. The average from milk wagons was 2,355,500; from groceries, 4,577,000. The milk from Halle contained the enormous amount of 6,000,000 to 30,0000,000, which is more than any American sewer. The bacteria of food are necessary to a great extent, the same as those of water. In milk the typhoid bacillus is most to be dreaded. Contamination may be imparted by water in the ways just described; also from the air, but not from the

cow direct. The tubercle bacilli are conveyed direct, if the udder is tuberculous, not otherwise; also direct by meat containing tubercular glands, or by tubercular lung, if eaten. Indirectly, they are conveyed by air, water and milk. In every three cases of pulmonary tuberculosis there is one of ulceration of the bowels from tubercular bacilli, carried to the alimentary canal from the mouth. In most cases of tuberculosis, infection is carried directly from man to man. The unfavorable acidity of the gastric juice, due to free hydrochloric acid, renders the stomach comparatively free from germs, but many are hurried through in food, or as spores are unharmed by the gastric juice. The duodenum and remainder of the canal are never free from multitudes of bacteria. In new-born infants the meconium contains no bacteria, but in from twelve to eighteen hours after birth the milk faeces contain an abundance of yeast and cocci. The bacillus coli communis is the most common in the bowel, and may enter the body and cause disease. The many ways that food, raw or half cooked, may be infected renders the alimentary canal always liable to multitudes of bacteria. Most saprophytes in the bowel are of themselves harmless, but some are pathogenic by their effect upon food prior to ingestion. Milk, cheese, sausage and meats, by ptomaines formed in them, are irritants to the gastro-intestinal canal, producing vomiting and diarrhoea, with symptoms of septic intoxication. They always cause irritation when aided by depressing conditions, such as heat and functional disturbance of any kind. After death it has been found that putrefaction always begins in the alimentary canal and extends to the rest of the body. The exact relation of bacteria to the changes of digestion, with our present knowledge, has never been definitely determined. We know their special action is upon the proteids or carbo-hydrates. The products of ordinary pancreatic digestion are the same, practically, as the putrefaction of albumenoid substances. As a source of contamination of the air, water and food, the soil stands pre-eminent, containing pyogenic bacteria, bacillus tuber-

culosis, bacillus typhosis and others, to say nothing of tetanus and malignant oedema, which are carried into the air by particles of dust. Bacteria penetrate the soil from three-fourths metre to one and one-half metres, each gramme of earth containing hundreds or thousands of them, depending upon the amount of organic matter.

For example, in Naples the dust in the most hygienic and least-busy portion of the city has 1,000,000 to each gramme; in the dirty and busy thoroughfares a gramme contains from 1,000,000,000 to 5,000,000,000. A student more conversant with bacteriology than literature might easily misconstrue the expression, "See Naples and die."

The presence of bacteria, then, in air, water and food does not necessarily have any significance unless they are found to be pathogenic. The presence of pathogenic germs signifies the possibility and probability of disease, if transmitted to our bodies under conditions favorable to their development. Their relation to health depends on the character of the germs and the power of resistance of the tissues.

It is then of the greatest importance that we establish the best sanitary relations to prevent the multiplication of germs, and insist upon all measures conducive to well being. In good health, a small number gaining admission into the body are destroyed or eliminated before their ptomaines can be generated and weaken the vitality of the individual. A most striking illustration of the prophylactic powers of healthy tissue is shown by the healing of wounds under the most adverse circumstances, while wounds in alcoholic and diabetic patients, and those following fever, often give us most trouble, even when treated in the most advanced and scientific manner.

Strict avoidance of all things that impair the normal tone of the tissues is the best possible preventative against infection by bacteria. Our boards of health should carry out more fully the rules of sanitation and disinfection.

The highest possible good to be derived from the scien-

tific application of the laws of bacteriology is that which teaches us that sanitation, cleanliness and a strict observance of the laws of health is the best method to avoid disease.

## THE CURABILITY OF GONORRHŒA.*

BY W. FRANK GLENN, M.D., OF NASHVILLE, TENN.,
Professor of Genito-Urinary Diseases in the Medical Department of Vanderbilt University.

Not a great many years since, gonorrhœa was regarded as a very slight, unimportant disease. It was considered not any worse, if as bad as a severe cold. As a consequence, considerable carelessness was manifested in its treatment, and much too little careful, scientific attention was paid to it. Nevertheless, the sufferer from gonorrhœa was continually realizing that it was a painful and serious affection, causing many weeks, months, and sometimes years of serious illness. The profession then contended for its curability in all cases, and the patient was frequently recommended to let it "run out." In other words, his physician realizing his incapacity to benefit him in the least degree, would tell him to do nothing, let it alone, go on, or do as he pleased, it would get well after a while. Such ridiculous advice as getting drunk, having intercourse excessively, catching the disease anew, were even recommended by intelligent physicians for the treatment of as serious, and far reaching a disease as gonorrhœa. Then suddenly came a reverse order of things; gonorrhœa was recognized as a most alarming disease, capable of causing very many serious troubles in the prostate gland, bladder, kidneys, ovaries and fallopian tubes. Then came the astonishing article of Noeggerath, making it the most hideous of all diseases, and even going so far as to say that no man ever recovered from a case of specific urethritis. And I regret to say, Mr. President, that so many gynæcologists have advanced the same idea, seemingly alone, because Noegger-

*A paper read at the Nashville Academy of Medicine.

ath said so. There is our one great mistake, in adopting an assertion as truth because some prominent man in the profession dogmatically asserts it. Now in the face of the dogma of Noeggerath, and many other rash gynæcologists, we ask ourselves as medical men, as cool, calm thinking men, is gonorrhœa ever curable?

While I admit a well-advanced case of gonorrhœa to be about as serious a disease as we are likely to meet, I shall consider myself as rash in the extreme, were I for one moment to entertain the idea that gonorrhœa was incurable. Every man in the medical world who has had even a small experience in its treatment, knows it is curable; and every genito-urinary man in the United States knows of numbers of persons who have been absolutely well for years. Is it not remarkable that it is the gynæclogists that claim its incurability, and not the genito-urinary surgeon? If Noeggarath and other gynæcologist's assertions were true and based on scientific facts, then every married women in the land would be afflicted with ovarian or tubular diseases, for in the cities I doubt if there is any man in one thousand who has reached the age of thirty who has not had gonorrhœa at least once, and yet how many ladies does every physician know who have numbers of children whose wombs, ovaries and tubes are in a healthy condition, giving them no trouble. It is time the medical profession is doing away with extreme and rash ideas, and turning their minds to weighing facts calmly and cooly, drawing rational conclusions. In conclusion, from a genito-urinary man's standpoint, I would answer the gynecologists question, "Is Gonorrhœa in the Male a Curable Disease," as follows: It is a curable disease beyond all question. It is curable in the vast majority of instances, and the cures are as complete and perfect as in any other disease.

# Selections.

SUCCESSFUL USE OF PROTONUCLEIN IN A CASE OF EXTREME ANÆMIA.—The case that forms the subject for this short

paper is that of a gentleman aged 54. He is highly educated, and has filled a number of positions of an important educational character. Previously he resided in India for several years. His health has not been good for about two years. During this period he suffered loss of flesh, strength, and appetite. In April 1895, the symptoms became more distressing, when it became necessary for him to give up his work as private tutor, and rest. He became a patient of mine about the end of September, 1895. At this date he was a pronounced victim to insomnia. His digestion was extremely bad, suffering much pain, and frequent nausea after taking nourishment, either liquid or solid. There was an excessive amount of flatulency. The bowels were very torpid. The pulse was weak, and usually as frequent as 100 per minute. There was always some elevation of temperature, sometimes as high as 102°. Continuous headache was another feature of the case.

The lips and conjunctivæ were almost colorless, and the tongue exceedingly pale. The skin had a pale lemon tint. The red blood corpuscles were only 1,200,000 per cubit millimetre. The urine was normal. No organic disease could be discovered anywhere in the system.

In spite of all efforts at treatment and feeding, he gradually grew worse. I had given his wife a very unfavorable opinion of the case, and advised a consultation.

Dr. J. E. Graham saw the case with me. No other disease could be discovered than that of progressive anæmia. It was agreed at this interview to place him in some hospital for a time. He was admitted into the Toronto Western Hospital on January 7th, 1896. I went with him in the coupe, and really feared he would collapse on the way. When he arrived at the hospital he was in such a state of exhaustion as to be unable to walk upstairs. On being taken into his room he became unconscious, and in this condition he was hurriedly undressed and put to bed with hot bags around him. In the course of an hour or so he gradually regained consciousness.

At this stage of his disease there were varying elevation of temperature and a subnormal condition of same. He had intense headache, and almost continuous insomnia. The bowels were constipated, and nearly everything in the way of nourish-

ment was vomited. The patient was in a state of extreme emaciation and asthenia. There was frequently low delirium and confusion of thought. He often regarded himself as a duality.

On his admission the bowels were washed out daily with a large enema, containing some boracic acid. Daily he was given a sponge bath. The stomach was washed out daily, except occasionally when he felt too weak. He was fed on peptonized milk, egg albumen and beef juice. The headache continued, however, to a most intense degree, and no improvement in the insomnia. For the headache, acetanalid, phenacetin, salol and other agents were employed, and with only the most temporary relief. Opium, chloral, paraldehyd and sulphonal were administered from time to time for the insomnia. On one occasion thirty grains of sulphonal were given, with the result of obtaining only a few hours imperfect sleep, followed the day afterward by much vomiting, great restlessness, extreme headache and feeble pulse.

He had been in the hospital a little over two weeks, and all the appearances pointed to an unfavorable termination of the case. He was now placed on Protonuclein (tablets), as prepared by "Carnrick." The enemata, lavage of the stomach, and same nourishment continued. Tablets were given every three hours. By the third day it became apparent that the patient was improving. The headache was the first symptom to become modified. In a week it had almost wholly disappeared, and at the date of writing is entirely gone.

The sleep soon became better. By the end of the first week on Protonuclein he would sleep three and four hours at a time. He now sleeps from six to eight hours, and wakes with a rested and refreshed feeling. The appetite is good. He can take eggs, meat, toast, porridge, oysters, beef-juice, bread and butter, milk and light puddings without the slightest discomfort. There is no nausea or vomiting; the bowels are quite regular, and no enemeta or aperients have been administered for at least ten days. The temperature is constantly normal. The patient is gaining in flesh and can walk about the ward and in the hall for an hour and experience no ill effects. The lips and nails have a good color, and the tongue has lost its pallor. The abdominal

walls, which were extremely retracted, are now filling with adipose tissue.

The most marked change, however, is to be found in the red blood globules. When the Protonuclein was first ordered, there were not quite 1,000,000 to the cubic milli-metre. Now there are 3,500,000. This is a remarkable increase when the condition at starting is borne in mind.

The progress of the patient is one of daily improvement. He will leave the hospital in two or three days, when the same line of treatment will be maintained, with the addition of a mild course of massage to assist in the development of the muscles.

It ought to be mentioned that the preparations of arsenic and iron had been fairly tried in this case, and could not be tolerated in any form. During the past three days arsenic has been tentatively prescribed, and so for has caused no disturbance, indicating an improved state of assimilation.

Since the above was written the patient has been out of the hospital for a short time, and the improvement still continues. The sleep and digestion are now good, and the muscles are gaining rapidly in tone and size.—*John Ferguson, A.M., M.D., in Canadian Medical Review.*

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Peroxide of Hydrogen.—Dr. Warren Brown, of Tacoma, Washington, in a paper on "Peroxide of Hydrogen," read before the Washington State Medical Society, and published in the *Medical Sentinel*, of Portland, Ore., Feb. 1896, after alluding to its method of manufacture, speaks of it therapeutically as follows:

Gonorrhœa may often be aborted by using a full strength hydrogen dioxide injection immediately on the very first appearance of discharge. The injection should be used four to six times in twenty-four hours and retained for five minutes.

Cystitis, where pus is voided with the urine, often yields rapidly to injections of a solution containing two ounces to the pint.

Otitis media is treated by hydrogen dioxide solutions in various strengths from 6 per cent. upward.

Eye diseases, where there is a purulent external inflammation, are constantly being benefitted by this agent. The Wills Eye Hospital, Philadelphia, uses a 50 per cent. strength of the so-called 15 volume solution. Blepharitis marginalis is quickly cured by touching the edges of the lids once or twice daily with a strong solution, care being taken to avoid getting it into the eye.

Ulcer of all kinds improve rapidly under its use, and for treating and cleansing venereal sores, as chancroids, etc., it is of great service.

Empyema, especially where there is from the first a stinking sanious exudation following incision, is very satisfactorily treated by washing out the cavity with a solution from one half to full strength.

In appendicitis, the abscess cavity is cleansed with this solution by many operators, in preference to any other antiseptic. Robert T. Morris, of New York, has laid special stress on the value of the peroxide in these cases.

In follicular tonsilitis, the use of a spray, diluted just enough to prevent the smarting sensation, and alternating with this, one of the alkaline antiseptic sprays, or gargles, is a very satisfactory procedure.

Diphtheria and all naso-pharyngeal inflammations where there is a pseudo-membranous and septic condition, have been treated very widely by means of this agent. I like the plan of Jennings in Detroit, who uses an irrigation of an aqueous solution of one-eighth each of hydrogen dioxide and listerine. He throws the solution into the pharynx with an all-soft rubber syringe every one, two or three hours. The plan is an admirable one for treating children, and the combination is pleasant and effective.

Atrophic rhinitis is benefitted remarkably by the use of a 40 per cent. spray. It should be used a few minutes before the employment of the usual alkaline, stimulating spray, and the powder insufflations. In this way the scabs are loosened, mucopurulent secretions are dissolved, and a stinking breath is converted into one that is pure and sweet.

In acute cases of eczema of the leg, we find this agent of the utmost value. The tissues are inflamed, hot, swollen and

oozing, the itching is almost unendurable, the odor is offensive. To secure the best results the limb is elevated, and a diluted solution of the peroxide is applied frequently, with cheese cloth, gauze or an atomizer. In two or three days a marked change for the better will be apparent, the pruritus is allayed, the purulent exudation is checked, and all inflammatory symptoms are subsiding. At this stage we begin the use of a soothing ointment, such as the boracic acid or zinc oxide, using lime liniment to wash the parts instead of water. Under this treatment, combined with rest, we will see our patient rapidly cured.

Eczema of the anus will rapidly improve if the fissures are touched twice a day with this solution, then dried gently with cotton, and a glycerite of lead application made. In nearly every form of acute eczema in the first and second stages the peroxide will give us the keenest satisfaction. The regular solution is diluted with two or more parts of water. Hydrogen peroxide is an excellent anti-pruritic and for this purpose it is widely used.

The hæmostatic value of this drug, as pointed out by Dr. Emerson Brewer, of New York, I can endorse. In operations on the nose and throat I have upon two occasions been enabled to check a persistent hemorrhage, when Monsel's solution and plugging had failed. At present I am in the habit of applying the full strength Hydrogen Peroxide after every operation on these parts. It is of special value after sawing out a deviated septum.

For flushing out a mammary abscess cavity this agent is invaluable.

Applied to the cervix uteri, adherent mucus is removed and our medications can be applied.

When it is inadvisable or impossible to make a complete opening of a fissure or abscess, irrigation with the peroxide will be found superior to all other antiseptics.

We have in peroxide of hydrogen a prompt, safe and efficient germicide. By its oxidizing power it rapidly decomposes pus, diphtheritic membranes, and other morbid putrefying material. It is a thorough deodorizer, and as a cleansing agent for foul wounds, abscesses, etc., it has no equal.

Of the different preparations of peroxide, Marchand's has been most uniformly satisfactory.

Since writing the foregoing paper my attention has been called to hydrozone, a stronger solution of peroxide of hydrogen, which for some months I have been using with much satisfaction.

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THE ANTITOXINE TREATMENT OF DIPHTHERIA.—In the *N. Y. Med. Record* of August 8th, ult., Dr. Adolf Baginsky, Director of the Kaiser and Kaiserin Friedrich Children's Hospital, of Berlin, cotradicts the statement recently made by Dr. Joseph Winter in the same journal, and gives the method of the selection of the cases, the separation of the cases of spurious which simulate diphtheria, concluding the brief but positive article as follows:

1. Our cases are to-day just as severe as they have ever been on admission to our hospital. It is absolutely untrue that since the introduction of the serum treatment we have been dealing with milder forms of diphtheria. On the contrary, we have had the worst forms and most malignant cases during all this time as well as during the last few months. It is therefore wrong to speak of mild epidemics, for even in my private consultation practice I have met the worst forms of diphtheria.

2. In spite of the malignant type of our cases we find that the course of treatment since the introduction of the so-called healing serum is so much more favorable that a comparison with former methods is uncalled for. We can easily compare results of the former clinical methods by noting the percentage of mortality. As an example allow me to offer the following statistics of the first half of the present year:

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|---|---|---|---|---|---|---|---|
| 1896. | January, | number | discharged | cured, | 27; | died, | 2 = 6.89 per cent. |
| | February, | " | " | " | 25; | " | 4 = 16 per cent. |
| | March, | " | " | " | 25; | " | 3 = 10.71 per cent. |
| | April, | " | " | " | 25; | " | 0 = 0 per cent. |
| | May, | " | " | " | 25; | " | 3 = 10.71 per cent. |
| | June, | " | " | " | 20; | " | 1 = 5 per cent. |

This is the percentage of mortality which we can place opposite former percentages of forty to fifty per cent. But this would be hardly enough if we did not consider the course taken by convalescing cases and the remedy used in the treatment.

3. When the antitoxin treatment was first introduced opposi-

tion was thought to be justified by the fact that with the greater number of admitted cases more mild cases were admitted to the hospital, and so it was asserted that a larger number of milder cases were treated to swell the favorable statistics. To disprove that I can show that, although the number of cases admitted has been considerably lessened, and the cases taken were always of the severest kind, the mortality has diminished and the percentage of discharged cured has considerably increased.

4. I have as yet never noticed, after an injection of antitoxin, whether the remedy was employed as a curative agent or was used in prophylactic doses to confer immunity (excepting in two cases which I shall report in detail later), any symptoms which were detrimental to the health of the patient. In the large amount of carefully studied material, I have looked at every factor and watched for harmful results, and cannot find a single fact which would tend to destroy my confidence in the absolute value of this antitoxin as a healing agent in diphtheria. I therefore cannot understand the reports of other observers about the poor results and effects of the serum. Surely it is not possible in comparison with the great value of antitoxin observed in such a large number of cases of diphtheria in our hospital to diminish this value by a few reports of unsuccessful or doubtful cases occurring elsewhere.

5. It is highly important that in the treatment of diphtheria with antitoxin the physician should first ascertain the quality of the antitoxin used and not take the first substance he finds labelled in the market. For it is a well-known fact that some alleged antitoxins are absolutely inert. It is therefore advisable to use, as we are in the habit of using, antitoxin, the preparation of which is under the control of the German Government. We use in our hospital two kinds of antitoxin: 1st, Aronson's, and, 2nd, Behring's.

6. It is also necessary to remember that diphtheria is a disease attended by many grave complications, and that antitoxin is not our sole reliance in such emergencies. To be markedly successful in this disease the physician must be a pathologist and a therapeutist, and be thoroughly in touch with all the special indications that may arise during its course. If he does not properly understand the leading principles of treatment the best

remedy we have will be a failure with him. The results to which I refer have been achieved not only in the hospital, but also in private practice.

I do not intend to go any further into this subject at the present time, but think it just to give my American colleagues a proper insight into the true state of affairs as they exist here and the facts as gained from the material under observation.

It is to be sincerely hoped that should American observers desire to pass criticism on our methods or report the affairs of our hospital they will qualify themselves with better information and study our workings properly—not as Dr. Winters has done or believes he has done. I am always ready to offer my hand cheerfully for this purpose.

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THE RADICAL TREATMENT OF PROSTATIC HYPERTROPHY.—(*Mittheilungen aus den Grenzgebieten der Medizin und Chirurgie*, Band I, Heft I), from a careful study of available clinical records, draws the following conclusions on the present position of castration as a method of treating hypertrophy of the prostate.

The results of this operative treatment agree with those of experimental research in showing that there is a close physiological connection between the prostate and the testicles, and that the development and healthy condition of the former depends upon the integrity of the latter. In a large proportion—83 per cent. of 148 cases collected by the author—castration was followed by a decided wasting of the prostate.

This wasting usually begins very soon after the operation, and in the course of a few weeks the organ is reduced to almost its normal volume.

In the very soft forms of prostatic enlargement the prognosis of castration is much more favorable than in cases in which the prostate is tough and firm.

There can be no doubt that castration is not only followed by reduced vascularity, but also of shrinking and fibroid degeneration of the glandular tissue.

As the vascular supply of the prostate is independent of that of the testicles, this atrophic change can only be attributed to a nervous influence.

Although after castration the restoration of the functions of the bladder is less certain than atrophy of the prostate, the surgeon may fairly anticipate that the operation will result in a decided relief in a large proportion of cases, and in complete cure in many.

Bruns arranges the successful cases in three groups.

The first comprises the cases of dysuria without retention; the operation is usually followed by the cessation of the frequent and urgent desire to pass the urine.

Even after long-continued dribbling, the urine may be discharged in a full stream.

Prostatic subjects suffering from retention, who for some few weeks only before the operation have been compelled to use the catheter, are, as a rule, able to dispense with this instrument and to pass urine spontaneously.

Those who have suffered from chronic retension, which has necessitated for a long time the continued use of the catheter, may be relieved after castration from the necessity of thus emptying the bladder.

In most cases which have been treated by operation, there is, if not complete cessation, a considerable alleviation of the symptoms of vesical catarrh.

Double castration, although an easy operation, and in itself free from any immediate danger, is open to serious objections even in the patients advanced in years.

Cases have been recorded in which it has been followed by nervous depressions and mental apathy.

For this reason the author is inclined to favor section and ligature of the vas, as the results obtained by this latter operation are very encouraging.

At the present time the most certain method of treating prostatic hypertrophy, especially in the earlier stages of the disease, is double castration.—*University Medical Magazine.*

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The Serum Diagnosis of Typhoid Fever.—The *Journal des practicens* for July 11th contains a report of a recent meeting of the Académie de mèdecine at which M. Dieulafoy read a paper on this subject. He alluded to a very important commu-

nication recently made by Widal in regard to a method of making an exact diagnosis in typhoid fever. The procedure was as follows: A pure culture of Eberth's bacilli was made in bouillon, and a preparation of this culture was placed under the microscope, when isolated and moving bacilli could be seen.

In order to make a comparison, a mixture was made in a test tube, which was composed of ten drops of the bouillon with the culture of Eberth's bacilli and a drop of blood, or, better still, of serum which had been separated from the blood of the finger of a typhoid-fever patient. A preparation of this was then placed under the microscope, and a startling phenomenon could be seen. The bacilli were not isolated and moving as in the preceding preparation; they had lost their mobility and had become agglutinated and joined together in masses, and in the preparation on the plates they had formed large islets which were separated by wide spaces; these spaces were also dotted with bacilli which were less mobile, undefined in appearance, and, as it were, drawn finally toward the masses, with which they came blended in their turn. This was the unvarying and startling phenomenon to be seen.

From this, said M. Dieulafoy, the diagnosis was made. A patient who furnished a serum which could cause similar changes in a bouillon of typhoid-fever culture, which manifested such agglutinant and immobilizing properties, was certainly attacked by typhoid fever, and by no other disease.

This phenomenon had been observed many times by Widal with the serum taken from patients who were in different stages of the disease. On the other hand, Widal had collected the serum from fourteen patients who were suffering from other diseases, such as nephritis, tuberculosis, pneumonia, icterus, rheumatism, etc., and experimented with it as described in the foregoing paragraph, and found that the bacilli remained moving and isoted.

The procedure, said M. Dieulafoy, was simple and rapid; it needed no laboratory material and no coloring matter; it was sufficient to have a culture in bouillon of Eberth's bacilli, which could be kept for several weeks, a microscope with the objective immersed, and a few drops of blood or the serum of the blood of a typhoid-fever patient.

M. Dieulafoy stated that he had made a test of this method at the Hospital Neckar, and that he had easily obtained the same results.—*N. Y. Med. Jour.*

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A High Reputation Sustained.—*The Medical Times and Hospital Gazette*, London, May 30, 1896, speaks so favorably of its experience with the American analgesic, antipyretic and anodyne, a preparation the medical profession has become accustomed to regard as one of the certainties of medicine, that we reprint below its words of approval, knowing them to be in accord with the consensus of opinion as expressed by the medical men in this country. "Antikamnia—under the above name, a free translation of which is 'opposed to pain'—now being introduced to the profession in the United Kingdom is an analgesic, antipyretic, and anodyne drug, which has already gained a high reputation in the United States. It is a coal-tar derivative, and belongs to the series which form the various amido compounds. It differs therapeutically, however, from most coal-tar products in producing a stimulating, instead of a depressing action on the nerve centers, especially those acting on the heart and circulatory system; hence, it may be administered, even in large doses, without fear of producing collapse and cyanosis, as occasionally occurs after the administration of antipyrin and other similar analgesic compounds. It has been very largely used in influenza, hay fever and asthma, with good results; but its most markedly beneficial effects are experienced when administered in neuralgia, rheumatism, sciatica, headache and pain due to disorders of menstruation. As an antipyretic, it is recommended to be given in doses of from five to ten grains every ten minutes, until the temperature has been reduced, or until forty or fifty grains have been taken, after which the remedy should be given at intervals of greater length. To relieve pain it is recommended to begin with a five grain dose; three minutes later the same dose to be repeated, and, if the pain continues, a third dose to be given a few minutes after the second. In our practice we have not found it necessary to give the remedy at such short intervals. In the treatment of neuralgia and headaches we have had satisfactory results from giving five-grain doses at intervals of ten to twenty

minutes, until three or four doses have been taken. We may add that the drug is sold in tablets (three and five grain sizes) as well as in the powdered form. The former may be swallowed whole, or crushed and dissolved in glycerine and water, or in an alcoholic menstruum. The powder is conveniently given in cachets, or dissolved in a little wine or aromatic tincture, combined with glycerine or syrup. The drug is deserving of trial, and those among our readers who have not yet tested it should write for a sample."

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EUCAINE AS A LOCAL ANÆSTHETIC.—Dr. G. Vinci, of Messina, described eucaine as possessing the properties of cocaine as a local anæsthetic, but as being less toxic and as having no effect upon the pupil. The last statement seemed to me to be of practical importance, because a dilated pupil is an impediment to the performance of many operations upon the eye. It has long been my practice to neutralize the dilating effect of cocaine by a preliminary application of eserine, but this course is not entirely satisfactory. It is difficult to secure the precise degree of effect which is desired, while the eserine dilates the vessels of the iris, and occasions free bleeding when they are incised. It also renders the iris tissue comparatively rigid, so that it is less easily drawn out of the anterior chamber. I obtained a supply of a five per cent. watery solution of Eucaine Hydrochlorate from Dr. Rogers, of 327 Oxford Street, and used it last week for a cataract extraction, the patient being a woman. Before my arrival the nurse had applied a drop of the solution within the lower lid every five minutes for six times, and I found the eye perfectly insensitive. The pupil was unaffected, and acted readily to light. There was scarcely any bleeding from the cut iris; there was perfect quiescence of the muscles, and there was no pain. I asked the patient whether she had felt anything, and she replied: "I felt something moving about my eye, but it did not hurt me." There was no pain afterwards, and healing was uninterrupted. I have since successfully used a single application of the same solution as a preliminary to the removal of a foreign body imbedded in the cornea.

In the original paper, it is said that eucaine has been suc-

cessfully used in dentistry and laryngology, and that solutions may be injected hypodermically without injury. My first experiments will certainly induce me to use it again, and for tenotomies as well as for iridectomy or extraction. It is said that the solution above mentioned may be sterilized by boiling, again and again, if necessary, without undergoing decomposition or suffering any deterioration of quality.—*Dr. R. Brudenell Carter, in London Lancet of July* 11, 1896.

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Inflammatory Diarrhœa.—In the chronic form of inmflamatory diarrhœa the treatment consists mainly in a careful regulation of the food. Milk in such a case is an irritant poison, which must be strictly forbidden; and starches are digested with difficulty, and must be very sparingly allowed.

In the insidious beginning of the disorder, when large pasty stools are being passed, the child, if an infant, should be fed with veal broth and barley-water in equal proportions; whey with cream; the yolk of one egg beaten up with broth or whey; and Mellin's Food mixed with whey or barley-water. The meals should be frequently varied during the day, and the quantity allowed must be strictly proportioned to the infant's powers of digestion.

For medicine, he may take a powder of rhubarb (gr. ij. iij.) and aromatic chalk (gr. iij.-v.) every night for three nights, and in the day, a mixture composed of half a drop or a drop of laudanum with four or five grains of the bicarbonate of soda in some aromatic water.—*Eustace Smith, M.D., in "Disease in Children."*

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A Point in Thigh Amputation.—Dr. Dawbarn (*Med. Record*) recommends that in thigh amputations the hamstrings shall first be cut so as to allow the long muscles to retract; then, when the amputation is made, the muscles will all be practically on a level so that no pockets will form for retention of blood.

# Editorial.

## OBITUARY—PROF. JOHN H. CALLENDER, M.D.

Dr. John H. Callender, after an illness of two weeks from dysentery, died at 7:40 Monday, August 3rd, at his institution in the Eighteenth District, Morningside Retreat. His death was not unexpected, his condition from the very first being critical. He leaves surviving him his wife and one daughter, his only child, Miss Anne Mary Callender.

Dr. Callender's death will not affect the continuance of Morningside Retreat, in which Dr. Callender and Dr. S. S. Crockett were associated.

John Hill Callender was born near Nashville, November 28, 1832. His father was Thomas Callender, born in Philadelphia, Pa., in 1796, and removed to Nashville in 1817, where he resided till his death in 1851. His occupation was that of a tobacconist and merchant. He was an Alderman of the city several terms and a member of the County Court. His religious faith was Presbyterian. He was the only son of James Thompson Callender, a native of Scotland, who came to America as a political exile in 1792 on account of the publication of radically democratic doctrines in a work entitled "The Political History of Great Britain." Shortly after he attracted the attention of Thomas Jefferson, and became a political writer in the interest of the views of that statesman, and a severe critic of some of the measures of Washington's administration, and particularly that of the elder Adams. He was a strenuous opponent of the Federal party of that day in its principles of government and its measures, and was master of a trenchant style in controversy, which rendered him quite obnoxious to its leaders. During the years of John Adams' administration he published in Philadelphia "The Political Register," a review of current political events. In 1798 he published a brochure entitled "The Prospect Before Us," a caustic arraignment of President Adams and denunciation of the alien and sedition act. He was then residing in Richmond, Va. Being an alien by birth, he was indicted for this publication under the provisions of the law he had denounced, for the defamation of the President, and was the first of the few convictions had under it. He was defended by William Wirt and George Hay, and for his illegal and tyrannical rulings in the trial, Justice Chase, of the United States Supreme Court, was afterwards impeached. James Thompson Callender afterward founded the Richmond Recorder, the predecessor of the Richmond En-

quirer, afterwards and for many years a newspaper of great power. He died in that city in 1806.

The mother of John H. Callender was Miss Mary Sangster, born in Fairfax County, Va., Jan. 10, 1805. She was the daughter of John Sangster, a farmer, who moved to Davidson County in 1820. In 1835 he moved to West Tennessee, where he died in 1855. She died Sept. 15, 1847.

John H. Callender attended the best classical schools at Nashville until his 17th year, when he entered the University of Nashville and remained there until its suspension in October, 1850, the termination of his collegiate junior year. In 1851 he entered the law office of Nicholson & Houston, Nashville, and soon after the law department of the University of Louisville. The illness of his father, followed by his death, recalled him in a short time, and his legal studies were suspended and finally abandoned. In 1852 he visited St. Louis, and was employed in the house of Woods, Christy & Co., one of the largest at that time in the West. In 1853 he returned to Nashville and commenced the study of medicine, taking his degree in the medical department of the University of Pennsylvania in 1855. December, 1855, he became joint proprietor and editor of the Nashville Patriot, and so remained till 1858. In that year he was made Professor of Materia Medica and Therapeutics in the Shelby Medical College at Nashville, filling that position till the suspension of exercises caused by the civil war in 1861. The same year he was appointed Surgeon to the Eleventh Tennessee Regiment, in command of Gen. Zollicoffer and then in service in Eastern Kentucky, which position he resigned in February, 1862.

After the close of hostilities he, in 1865, became editorially connected with the Nashville Union and American, and retained that position until 1869. He was a delegate from the State-at-large to the Union National Convention in 1860, which nominated Bell and Everett, and also to the Democratic Convention in 1868, which nominated Seymour and Blair. During the campaign he was private secretary to John Bell.

During 1868 he was made Professor of Materia Medica and Therapeutics in the medical department of the University of Nashville. In 1870 he was appointed Medical Superintendent of the Tennessee Hospital for the Insane, which position he held for twenty-five years. On retiring from this position in 1895 he established a private sanitarium for patients with nervous diseases in the western part of the city, which was successful enough to demand larger buildings. For this purpose he had secured the school property in East Nashville owned by the late Mrs. Clarke, and had opened it as a private hospital with every promise of success.

In 1870 Dr. Callender was transferred to the chair of diseases of the brain and nervous system in the medical department of the University of Nashville, and in 1880 was transferred to the chair of physiology and psychology in the medical departments of the University of Nashville and of Vanderbilt University. In 1876 he was a delegate from the Tennessee Medical Society to the International Medical Congress at Philadelphia. In 1881 he was made President of the Association of Medical Superinten-

dents of American Institutions for the Insane, being the youngest man and the only man from the South ever honored with that position. He was one of the witnesses summoned to give expert testimony in the celebrated trial of Chas. J. Guitteau, on the question of his sanity, and after a laborious investigation, pronounced him to be insane, though leaving home with a different impression.

On the separation of the medical schools of the University of Nashville and Vanderbilt University, which up to 1894 had been conducted jointly, Dr. Callender allied himself with the former institution, was active in designing and building its new Medical College, and in the organization of the medical faculty, of which he at once became Dean. It is in the college that his death will be most deeply felt, for his reputation as a student of nervous diseases was national.

It will be seen that Dr. Callender has led a varied, busy and successful life. He was never a schemer or of a mere speculative turn, but original and independent, maintaining his own views. Carefully trained in the classics, a cormorant both as student and reader, of boundless memory and wonderful power of analysis; as a writer he was graceful, fluent and exhaustive, and figured conspicuously and brilliantly as a political leader, having few equals in the South. Born and reared in Nashville, his sympathies readily blended with the social, scientific or political interests of the State, and being of an ardent nature, intensely individual and positive in his opinions and character, he was as prompt as incisive in the expression of his own convictions. It was this bent of his mind, rather than a love for party or party conflict, that prompted his acceptance of the editorship of the leading newspaper of the State. As a mere boy he placed himself at the head of the Whig party of Tennessee, and by his terse and vigorous style as a political editor and his great sagacity in moulding events, he proved himself worthy to follow the footsteps of his distinguished grandfather.

As a teacher he was thorough, classic in style and purely didatic in manner. As an essayist on many literary and scientific subjects he had few, if any equals in Tennessee. In his specialty as an alienist, he had received from his associates many marks of distinguished honor, and in the management of the institution over which he presided so long, he was ranked as something original, managing it in a different manner and with success equal to the best in the land.

Dr. Callender married at Nashville, Feb. 24, 1858, Miss Della Jefferson Ford, daughter of Dr. John Pryor Ford, of this city. Dr. Ford was born in Cumberland County, Va., in 1810, and removed to Nashville from Huntsville, Ala., in 1842, and was a leading practitioner and teacher of medicine until his death in 1865—being professor of obstetrics and diseases of women and children from 1858 to 1862. His wife, Ann Smith Jefferson, was born also in Cumberland County, Va., and was collaterally related to Thomas Jefferson, the Sage of Monticello. Mrs. Callender was a great grand-niece of President Jefferson, and a niece of Gen. John R. Jefferson. By his marriage with Miss Ford, Dr. Callender had but one

child, Annie Mary Callender, born Aug. 5, 1864, and a graduate of the Nashville College for Young Ladies.

The physicians of Nashville met in the hall of the Academy of Medicine, Tuesday evening, August 4th, to take suitable action and adopt resolutions of respect to the memory of their deceased associate, a large attendance being on hand. The meeting was called to order by Dr. A. M. Trawick.

Dr. T. L. Maddin was elected Chairman, and Dr. A. B. Cooke, Secretary. On motion of Dr. Trawick, a committee of five was appointed to draft the resolutions. The committee was as follows: Drs. D. J. Roberts, J. D. Plunket, T. Menees, T. G. Shannon, and James B. Stephens. While the committee were out, and after their return, remarks were made by the following gentlemen: Drs. A. M. Trawick, C. L. Lewis, T. L. Maddin, W. A. Atchison, G. C. Savage, and D. J. Roberts. The report of the committee was submitted and adopted.

A motion by Dr. Plunket for the members of the profession in the city to furnish a floral tribute was carried, and the Secretary and Dr. Bass were appointed to select the design. The following gentlemen were appointed honorary pall-bearers: Drs. Atchison, Stephens, Shannon, Roberts, Trawick, Plunket, Maddin and Savage.

It was decided that the physicians as far as possible attend the funeral in a body, meeting at the Academy of Medicine, at 9:30 o'clock the next morning.

The resolutions adopted were as follows:

"In all ages and amongst all people who have enjoyed a civilization it has been a custom to mark in some form of honorable mention the exit from the earthly scene of such of their fellows as have achieved distinction, and to embalm in memory, either by speech or emblem, the story of their lives. This custom has origin in the higher emotional instincts of human nature, and is in itself ennobling. We feel intuitive admiration for a famous career, devoted to philanthropic or patriotic objects, and in according honor to him who has been its embodiment, we do honor to ourselves. While the exercise of this generous propensity serves to illustrate and perpetuate the renown of individuals, it serves also to exalt our self-esteem as members of a race capable of the deeds which have evoked our pride and emulation. At the end of a distinguished life the seal of historic judgment stands ready to be stamped, and in recounting its acts and reviewing its virtues, we incite and foster a laudable ambition to imitate them. And thus a beautiful custom becomes a highly beneficent one. The statues and monuments the world has reared to its heroes are landmarks on the highways of enlightenment and progress. The biographers of the eminent are lessons of noble incentive. When we pause for a few moments in our daily pursuits, as we do now, to recite the history and descant upon the work of one of our departed brethren of the profession, we not only pay honor to him, but to the calling which his life honored, and in the essay to do so we may imbibe for ourselves broader professional senti-

ments, and inspire loftier aspirations in those who are to succeeed us."*

These words of our lamented and illustrious associate, issued but little over a year ago in behalf of the memory of a departed colleague, form a most fitting peroration to any utterances we may give forth on this occasion. At that time, and even up to a few brief days ago, he was the embodiment of a mature and robust physical manhood; in possession of intellectual developments of the highest order and most careful training. And now "his pillar has fallen, but his light has not gone out." "Life is but a battle with temptation; the result, eternal light to the victor." "The bright sun shines not out of an empty heaven to light up a soulless world." "He that testifieth these things saith, surely I come quickly."

Yes, in accordance with that supreme power that ruleth everything, from the smallest to the greatest and grandest, from the lowliest to the most exalted, and at all times, even from seedtime to the harvest, our most honorable associate, friend and brother, is with us no more; yet, we can most truly, conscientiously and sincerely say that, in every station to which he was called, from early boyhood to the maturity and ripening of his days, he served with honor to himself and greater honor and credit to the community in which he lived.

As a citizen, bringing to bear upon the solution of all questions of a private or public nature, the calm, deliberate and earnest efforts of a well trained, thoroughly disciplined and logical mind, our loss is indeed great; and not only is it ours, but it pertains alike to the community in which he lived and in which he was so highly esteemed and respected, and the State of his nativity which he served so well and to which he yielded only renown.

Ever a student, faithful, earnest and sincere in the broad and ennobling domain of medicine, his warm and impulsive heart, his broad and expansive humanity, was but deepened and enlarged by a quarter of a century's care of some of the most unfortunate of his race. "*Non tetigit quod non ornavit*" may well be said of him, whether in the enticing walks of literature, the more rugged, but not less entrancing paths of science and art, the broader field of a well-cultured humanity, in the lights and shadows of the social circle, or within the walls of his home and at his own fireside.

Therefore, to the alumni of the University of Nashville, whose honors and prestige were but graced by him; to the students of medicine throughout the broad land with whom he had labored in the past; to the faculty of his college whose renown he so greatly enhanced; to his associates in the medical profession, who so satisfactorily sought his counsel and advice; to the community in which he was reared and lived, and whose lot he shared; to the State which he served so faithfully, long and well; to the nation, which had tested his skill and erudition in the solution of intricate questions, and to the sorrow-stricken wife and daughter,

*Memorial Address: the late Wm. T. Briggs, M.D., by John H. Callender, M.D. Trans. Tenn. State Med. Society, 1895.

we desire to tender our sincere sympathies, and to assure them we not only feel, but share, their irreparable loss.

"Now the laborer's task is o'er;
Now the battle day is past;
Now upon the farther shore,
Lands the voyager at last."

DEERING J. ROBERTS,
THOS. MENEES,
J. D. PLUNKET,
J. B. STEPHENS,
T. G. SHANNON.
} Committee.

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At a called meeting of the Faculty and Associate Faculty of the Medical Department of the University of Nashville, held for the purpos of taking suitable action in regard to the death of Prof. John H. Callender, the following resolutions were adopted:

WHEREAS, death has again invaded our ranks and removed from among us the most distinguished, the most versatile, and the most accomplished of our number, the beloved John H. Callender; therefore be it

*Resolved*, that this Faculty deplores his death as an irreparable loss to the college, for which his long term of association with it as professor in various departments he had labored so earnestly, devotedly and successfully, for of his work it can be truthfully claimed that he did more than any other man to bring this school to its present status of prosperity and high standing.

*Resolved*, that the medical profession has lost one of its most shining lights. Few men have lived who possessed so many qualities of excellence as Prof. Callender. He was pre-eminently fitted by nature for the numerous stations of honor and positions of trust which at various times he adorned. Equipped with a mind of rare superiority, endowed with all the attributes that make the man the gentleman, with a command of language and a fulness of information that was almost phenomenal, with an enthusiastic devotion to the specialty of which he was master, that made his reputation as an alienist national, he leaves behind a reputation of which we, his associates, are justly proud.

*Resolved*, that the city of Nashville, in his untimely death, has lost one of her most valuable citizens. Distinguished for his unexcelled classical attainments, he was an ornament to the community in which he lived. For twenty-five years as Superintendent of the State Insane Asylum, he won rare distinction, for he was the only man in the entire South who was called to the presidency of the National Association of Insane Asylum Superintendents. His works will prove a lasting monument to his memory. With us will mourn the entire population of Nashville.

*Resolved*, that the Faculty of the Medical Department of the Univer-

sity of Nashville extends to his bereaved family our heart-felt sympathy and condolence.

*Resolved*, that the Faculty and sub-Faculty attend his funeral in a body, and that a copy of these resolutions be sent by the Secretary to the grief-stricken family, and be offered for publication to the city press and medical journals of the State.

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PROTONUCLEIN IN PURULENT SEPSIS.—On May 28th ult., Mrs. ——, æt. 24, multipara, miscarried at about the sixth month. Five days later she developed marked symptoms of puerperal sepsis. Chill, high fever, profuse respiration, rapid pulse, pain and tenderness over hypogastrium, etc. Nothwithstanding thorough cleansing of uterine cavity, douches of hot water, antiseptics, quinine, stimulants, etc., the symptoms persisted for six days following, the pulse rate and temperature increasing, marking respectively 140 and 104°. The use of Protonuclein Tablets (Carnrick's) 5 grs. every three hours was then commenced with marked improvement in every symptom within twenty-four hours, which was steadily maintained until convalescence was established. My only regret is that it was not resorted to earlier, as I believe thereby I would have been relieved of many anxious hours of uncertainty and doubt.

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SANMETTO IN CATARRH OF THE BLADDER WITH ENLARGED PROSTATE.—Thos. Leary, M.D., L. R. C. P., I.; L. M., Member British Medical Association, Medical Officer Castlederg Dispensary, Workhouse and Farm Hospital, Castlederg, County of Tyrone, Ireland, says: "I have used Sanmetto in several cases of catarrh of the bladder with enlarged prostate and much pain in urinating, and in every case it gave me very great satisfaction. I have therefore much pleasure in recommending Sanmetto in all such cases as a most valuable remedy."

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MEDICAL EDUCATION FOR 1896-7.—The three Medical Departments of the three great Universities located in Nashville, offer advantages of a peculiarly desirable character to all who wish to become proficient in the healing art. With new, modern, commodious and in everyway suitable buildings, Faculties of erudition and experience, and the clinical advantages of the City Hospital, together with the Free College Out-door Clinics, established by each, nothing will be found wanting to facilitate the aims of any and all students who may apply. Nashville has long enjoyed a most enviable reputation as a medical center, and we feel fully justified in saying that its former high standard will be faithfully maintained.

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WALKER GREEN PHARMACEUTICAL COMPANY: Permit me to say that I have dispensed from my office many bottles of your Elixir Six Iodides, for the simple reason that my patients were unable to obtain the

preparation from the retail druggists, and for the more important reason to prevent substitution or sophistication, which, although not generally practiced, are unfortunately too frequently met with. The druggist's interest being to sell all the drugs he can, for therein lies his bread and butter, while the physician's lies in an entirely different direction, and that is, to cure his patients as soon as possible.

My experience with the Elixir Six Iodides has been so far a most happy one, and I can only congratulate your firm in placing in the hands of physicians so efficient a preparation. I shall continue to dispense it as long as it maintains the present excellent standard in curative effects.

On referring to my case book I find I have of late administered nearly as many as four dozen, which goes to show how frequently the "Six Iodides" can be found useful.

The fact remains patent that I have found in this particular preparation a desideratum which no other combination seems to possess. As a typical case I shall mention one of necrosis of the sternum in a young man, with no history of syphilis, where every other means had failed to arrest the destruction of bone tissue or structure. He had been under treatment at one of our best hospitals in this city, and undergone a surgical operation, "Scraping the Bone," etc., which proved useless. The discharge continued, and as a dernier resort he came to me. Three weeks after the institution of "Six Iodides," the ugly sinus had completely dried up. Nor has there been any sign of imperfect cure. Patient reports himself as being perfectly well. Since then has married and is the father of a "bouncing boy," free from any taint of disease whatever. Every alterative, so-called, had been tried in vain; I had almost despaired of ever curing the fellow when he was put on the "Elixir," which did the work most thoroughly. Trusting that the medical profession may be induced to give this truly reliable preparation a thorough trial and be convinced of its intrinsic value.

WILLIAM A. ARMSTRONG, M.D.,
1808 Park Avenue, Philadelphia, Penn.

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I HAVE to date prescribed your preparations with good results. Your Bromidia is particularly a powerful and valuable preparation. Your Papine is pleasant, effective, and takes the place of opium well. A point of economy in favor of your preparations is that they do not require enormous doses to produce the desired effects.

GEO. M. ROSS, M.D.,
3628 State Street, Chicago, Ill.
April 21, 1896.

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

THE THIRD ANNUAL MEETING OF THE AMERICAN ACADEMY OF RAILWAY SURGEONS will be held in Chicago, Illinois, at the Auditorium on Wednesday, Thursday and Friday, September 23, 24 and 25, 1896. Twenty-four excellent papers are already on the program, and other papers will be added before the final announcement is made. All who are interested in the advancement of Railway Surgery are respectfully invited to attend and participate in the proceedings. Arrangements are being completed by the Chairman, Dr. W. J. Galbraith, Omaha, Neb., for the transportation of fellows to the next annual meeting. Hotel accomodations will be arranged for by Dr. A. D. Bevan, Chicago, Ill., Chairman Committee of Arrangements.

JOHN E. OWENS, M.D., *President*, Chicago, Ill.
WEBB J. KELLY, M.D., *Secretary*, Galion, Ohio.

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AMERICAN PUBLIC HEALTH ASSOCIATION.—The twenty-fourth annual meeting of the American Public Health Association will be held at Buffalo, N. Y., September 15–18, 1896. The Executive Committee have selected the following topics for consideration: 1. The pollution of water-supplies. 2. The disposal of garbage and refuse. 3. Animal diseases and animal food. 4. The nomenclature of diseases and forms of statistics. 5. Protective inoculations in infectious diseases. 6. National health legislation. 7. The cause and prevention of diphtheria. 8. Causes and prevention of infant mortality. 9. Car sanitation. 10. The prevention of the spread of yellow fever. 11. Steamship and steamboat sanitation. 12. The transportation and disposal of the dead. 13. The use of alcoholic drinks from a sanitary standpoint. 14. The centennial of vaccination. 15. The relation of forestry to public health. 16. Transportation of diseased tissues by mail. 17. River conservancy boards of supervision.

Upon all the above subjects special committees have been appointed. Papers will be received upon other sanitary and hygienic subjects also.

Secretary's office, Concord, N. H.

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IN FERMENTATIVE DISORDERS OF THE STOMACH, and in corresponding forms of diarrhœa, we consider listerine certainly a safe and also a valuable preparation. It is not at all unpleasant to take when properly diluted; especially, then, as an internal antiseptic do we recommend its use. It is, however, largely used as an external antiseptic, and its oily constituents give it a more healing and penetrating power than is possessed by a purely mineral solution. As a toilet antiseptic to use after a post-mortem, or similar work, listerine, with its pleasant odor, need only to be tried to find a permanent place there. Listerine is a very attractive looking preparation, the liquid being crystal clear, with no sediment or undissolved oils whatever. The Lambert Pharmacal Company have introduced heir product strictly through the profession, which attests their faith in its efficiency.—*Maritime Medical News, Halifax, N. S.*

NEW ORLEANS POLYCLINIC.—The tenth regular session of the New Orleans Polyclinic will begin on January 11, 1897, to continue for three terms of six weeks each, ending May 15, 1897. Vast facilities for practical post-graduate teaching at the great Charity Hospital, at the Eye, Ear, Nose and Throat Hospital, and at the special clinics in the Polyclinic's new building. For announcement or further information, address New Orleans Polyclinic, P. O. Box 797, New Orleans, La.

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THE EIGHTH ANNUAL MEETING OF THE TRI-STATE MEDICAL SOCIETY of Alabama, Georgia and Tennessee will be held in Chattanooga October 13, 14 and 15, 1896. A number of most excellent papers from leading representative men of the trio of States are promised, and a most enjoyable meeting is assured. All members of the regular medical profession are respectfully invited to attend and participate in the meeting. Railroad and hotel rates as usual.

DR. FRANK TRESTER SMITH, *Secretary*, Chattanooga.
J. B. MURFREE, M.D., *President*.

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FELLOWS' SYRUP HYPOPHOS. COMP.—What two eminent physicians of world-wide reputation have said regarding this standard preparation: Dr. Milner Fothergill wrote: "The combination (Fellows' Hypophosphites) is an excellent one—the best yet made to my knowledge. It is a happy thought. It is a good all-round tonic, specially indicated when there is nervous exhaustion. It is readily digestible, and has given much satisfaction in my experience of it." Lennox Browne, F. R. C. S., senior surgeon to the London Throat and Ear Hospital, wrote: "Having thus a considerable experience of the preparation, I have much pleasure in advocating its use by my professional brethren, and with a confident expectation that their experience will be equally gratifying with my own. Mr. Fellows urgently requests every physician in prescribing his Compound Syrup of Hypophosphites to see that his patient receives the original article to guard against substitution."

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MAY ADVANCE THE PRICE OF THIS FRUIT.—A French translator is authority for the statement that Paris women now use lemons as pessaries, with much success, except in "remote" cases. A surgeon recently removed one which had become imbedded after having been worn for eight years. Thus the lemon-ades the cause of gynecology.

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"THAT young doctor makes an immense number of calls on Mrs. Oglesby. Is she very sick?"

"No; she is very pretty."—*Truth*.

ISAAC N. LOVE, M.D., our versatile contemporary to the extreme regret of his associates has withdrawn from the Faculty of the Marion-Sims Medical College, of St. Louis, in order to more fully devote his time and scintillating talents to his admirable journal, *The Medical Mirror*. While the *Mirror* has reflected much that has proven good, its concentrated rays may hereafter be confidently expected to be even more brilliant. We can but tender our sincere regrets to his associates and congratulate the readers of the *Mirror* in claiming his undivided attention.

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OPIUM and its alkaloids are invaluable drugs, but have disadvantages. Papine serves a similar purpose, without the disadvantages. IODIA is an alterative in the true sense of the word. BROMIDIA has a host of users throughout the civilized world, many of whom stand high in professional renown. In prescribing these preparations always specify "*Battle's*," and see that the prescription goes to an honorable and reputable druggist who will not stultify or degrade his good name and reputation by *substitution*.

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DR. W. R. HAYDEN, of Bedford Springs, Mass., has been elected to the Massachusetts legislature. His name is a most familiar one to the profession of America as the President of the New York Pharmaceutical Co., and we congratulate both the doctor and the State.

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# Reviews and Book Notices.

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A TREATISE ON APPENDICITIS. By JOHN B. DEAVER, M.D., Surgeon to the German Hospital, Philadelphia. 8vo., cloth, pp. 168, with 32 full-page plates, and other illustrations, price $3.50. P. BLAKISTON, SON & Co., Publishers, 1012 Walnut Street, Philadelphia. 1896.

We have received the above work with much pleasure, and only regret that space precludes the possibility of our giving it the extended notice its merits so eminently deserve.

A work from the pen of Dr. Deaver deserves more than a passing notice. For many years he has been giving the subject of appendicitis great attention, and from his experience alone in the German Hospital of Philadelphia, his deductions regarding the treatment of this now very frequent affection should be regarded very important. Probably no one is better qualified to present a treatise on this subject than Dr. Deaver. His peculiar

analytical modes of thought, his thorough anatomical knowledge, his abundant opportunities for clinical observation peculiarly fitted him for the work. The very large amount of information comprised in this volume, and its ready practibility, constitutes its valid claim to every physician's library. The author has the following in the Preface:

"Appendicitis, in a general way, has been so widely and thoroughly discussed that in its usual forms its diagnosis is comparatively devoid of difficulty. No inflammatory affection of the abdominal cavity, however, is capable of such varied symptoms, of so many serious complications, all of which demand the most thorough knowledge for their treatment.

It has been my desire to present in this volume such a systematic study of the disease that not only the usual symptoms may be traced from their inception to their termination, but also that the various anomalous conditions so frequently met with may be recognized with equal facility. I have, therefore, endeavored to emphasize the ætiology, symptomatology, and special technique in the operative treatment. The observation herein contained are the result of an experience in the treatment of over five hundred cases."

We are more than charmed as well as entertained and instructed. Throughout the work, all operative proceedings are clearly and satisfactorily described in graceful and fluent language, the author's opinions are carefully and plainly stated, the reader never being left in doubt as to the most advisable technique.

Judging from the appearance of the work, the typography of which does the publishers, Messrs. P. Blakiston, Son & Co., no little credit—its equal has yet to be produced.

HEMORRHOIDS AND OTHER NON-MALIGNANT RECTAL DISEASES; DIAGNOSIS AND TREATMENT. By W. P. AGNEW, M.D. Third edition. 8vo., cloth, pp. 214, drice $2.75. Pacific Press Publishing Co., San Francisco, Cal. 1896.

In this manual the author endeavors to give in plain and comprehensive terms, briefly, and with little discussion, a few general rules, which he hopes may lead to successful treatment of all non-malignant rectal diseases, and for which the general practitioner will often be called on. Hemorrhoids being the

most common, and almost universal affliction at some period of life in civilized peoples, is given the greatest degree of attention.

In his introductory Dr. Agnew says: "In none of the books heretofore published on the subject of rectal diseases, do we find suitable instructions whereby the beginner may knowingly and intelligently engage in a rectal examination—what to expect, where and how to find it, and how to pursue each succeeding step in applying the treatment after a diagnosis has been reached. Writers either presume too much on the part of those who have not had experience, or are so habituated to the use of general anæsthesia in accomplishing the objects sought, that milder means have been seriously neglected. Finding many otherwise well-informed practitioners at a great disadvantage in the examination and conduct of a rectal case, was one of the leading incentives that resulted in the preparation of the following few pages."

THE AMERICAN ACADEMY OF RAILWAY SURGEONS REPORT of the Second Annual Meeting, held at Chicago, Ill., September 25, 26, and 27, 1895. Cloth, pp. 221. Edited by R. HARVEY REED, M.D., Columbus, Ohio. Printed by the American Medical Association Press. 1895.

This excellent work, containing, as it does, over 200 pages, is so classified that the reader may easily turn to any particular subject desired. The articles are bright, instructive and do credit to the contributors.

As a frontispiece is the photograph of the first President of the American Academy of Railway Surgeons, photographs of other officials of the Association, and practical elucidative illustrations also embelish its handsome pages.

The book is gotten up in neat style and good workmanship by the Press of the American Medical Association. We heartly recommend it to the kind consideration of our readers.

GRAY'S ANATOMY—*New and Revised Edition.*

Messrs. Lea Brothers & Co., of 706 Samson Street, Philadelphia, announce the publication upon September 1st of a revised edition of Gray's Anatomy, which will be in time for the assembling classes in the various medical schools.

In this new edition every page has received the careful scrutiny of a corps of eminent American anatomists and such changes have been made as are necessary to represent the advances of anatomical knowledge and in methods of teaching since the recent issuance of the thirteenth edition. The section on the Brain, Spinal Cord, and Viscera have been entirely rewritten and the new matter added throughout will increase the work by about seventy-five pages.

No less important is the addition of about one hundred and thirty-five new and handsome engravings, enriching and completing the unrivalled series of illustrations which have always formed a distinguishing feature of this work. As heretofore, distinctive colors have been used to give greater prominence to the attachments of muscles and to veins, arteries and nerves.

In the mechanical execution no effort has been spared to render the revision worthy of a continuation of the reputation won by "Gray" during the past forty years as "the foremost of all medical text-books."

The price will be retained at the previous reasonable figure.

BULLETIN OF THE ALUMNI ASSOCIATION OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NASHVILLE.

This is a 32 page, 8vo pamphlet, issued by the Association, of which J. C. Cain, M.D., is President, and Dr. J. C. Pryor is Secretary. It is a very creditable production, handsomely printed on good paper, and containing a fund of valuable and interesting information quite creditable to the old and renowned school in whose alumni are included many of the leading medical men of the South.

The editorials comprise a Historical Reference, Organization, Next Annual Meeting, Commencement Exercises 1895-1896, Charge to Graduating Class, etc.

The original articles include Some Points in Differential Diagnosis and Treatment of Skin Diseases, by C. R. Atkinson, M.D.; Diphtheria, by Larkin Smith, M.D.; Dedication of the New Medical Department Building; Address by Hon. Horace H. Lurton; Tribute to the Memory of the late W. K. Bowling, M.D.

A blank application for membership is enclosed; all reputa-

ble alumni being eligible. Application by postal card or otherwise to Dr. J. C. Pryor, Sec'y of the Association, or to Dr. W. G. Ewing, Sec'y of the Faculty, will secure a copy.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by THOMAS L. STEDMAN, M.D., New York City. In Twenty Volumes. Volume VIII. "Diseases of the Digestive Organs." New York: WILLIAM WOOD AND COMPANY. 1896.

As was the case with Volume VI., it has again been found necessary to issue the eighth volume out of the regular order. Volume VII. will be the next volume to appear, upon publication of which the series will be consecutive as far as Vol. VIII.

The publishers can not but congratulate themselves that they have been enabled, notwithstanding the fact that the authors of this series are so widely scattered over the world, to issue the volumes with great regularity at three-month intervals, as announced at the beginning of the series.

The present volume, it will be seen, has been prepared by eight different authors, four of whom are Americans and four Germans; is illustrated by over one hundred original engravings, and it is believed will be found fully to sustain the high reputation already attained by this great work.

The contributors are B. Farquhar Curtis, M.D., and Max Einhorn, M.D., of New York; Reginald H. Fritz, M.D., of Boston; James M. French, M.D., of Cincinnati; J. Ch. Huston, M.D., of Memmingen, Bavaria; Drs. Werner Hümel and Johann Miculicz, of Breslau; and Hans Leo, M.D., of Bonn.

The "Diseases of the Digestive Organs" is embraced in the volume, which we can conscienciously say are fully in keeping with the excellent series that have preceded it.

THE MULTUM IN PARVO REFERENCE AND DOSE BOOK. By C. HENRI LEONARD, M.A., M.D., Professor of the Medical and Surgical Diseases of Women, Detroit College of Medicine. Flexible leather, 143 pages, price 75 cents. Detroit, Mich., 1896. THE ILLUSTRATED MEDICAL JOURNAL CO., Publishers.

This is a recent edition of the Dose Book, of which the title page informs us, some forty thousand copies have been issued. Beside the doses of some 3,500 preparations being given, it has

numerous tables, such as the solubility of chemicals, pronunciation of medical proper names, poisons and their antidotes, incompatibles, tests for urinary deposits, abbreviations, table of fees, etc. It will be found a very handy pocket companion.

A STUDY OF HYPNOTISM. By SIDNEY FLOWER, author of "Hypnotism up to Date." Cloth, gilt top, pp. 226, published by The Psychic Publishing Co., Chicago, Ill. 1896.

MISKEL (Doctor's Story Series). By L. M. PHILLIPS. Paper, pp. 266, price fifty cents. BAILEY & FAIRCHILD Publishers, 24 Pearl Place, New York. 1896.

These two works of *fiction* consist simply in the marring of good paper and the waste of printer's ink, both of which might have been devoted to a better purpose.

While realizing that good fiction should constitute a part of every medical man's reading the waste of time on such miserable trash as these two additions to the fiction of the day we can not commend. If "Miskel" is a fair sample of what The Doctor's Story Series is to consist, it is hoped that it will be a short series. Both of these publications are devoted to hypnotism, but can only serve to bring a possible branch of the science and art of medicine into ridicule and disrepute. Notwithstanding, some of our contemporaries have seen proper to give a favorable report of both these publications, we regret that we can not agree with them.

THE THREE ETHICAL CODES. That of the American Medical Association; Its Constitution, By-Laws, Amendments, Etc. That of the American Institute of Homœopathy and that of the National Eclectic Medical Society. Limp cloth, round corners, 55 pages, post paid, 50 cents. THE ILLUSTRATED MEDICAL JOURNAL CO., Publishers, Detroit, Mich.

By comparing the Code of the Homœopathic Society with that of the American Medical Association, it will be found that several sections of the former are similar to the latter's Code. The Eclectic Code is worthy of mention for its brevity.

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AN ANOMALOUS CONDITION.—An Irishman once told his physician "that he stuffed him with so many drugs that he was sick a long time after he got well."

# THE SOUTHERN PRACTITIONER.

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*DEERING J. ROBERTS, M.D.,* - - *Editor and Proprietor.*

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## Original Communications.

### OBSERVATIONS UPON SURGICAL DISEASES OF THE KIDNEY.*


BY RICHARD DOUGLAS, M.D., NASHVILLE, TENN.

Professor of Gynecology and Abdominal Surgery in Vanderbilt University—Medical Department.


#### ANATOMY.

Contemplating the execution of a surgical operation upon any part of the human economy a brief mental review of the anatomical land-marks is commendable. The kidney resting in the hypochondriac and lumbar regions of either side, lying entirely behind the peritoneum embeded in a cushion of fat, in close relation the diaphragm and its pleura, the liver, duodenum and colon. The average size of the kidney is 4½ inches long, 2½ inches in breadth, and 1¼ inches in thickness. The kidneys rest

*Read at the Nashville Academy of Medicine.

about equally upon the diaphragm and the anterior layer of the posterior aponeurosis of the transversalis muscle. The upper edge of the kidney corresponds to a space between the eleventh and twelfth ribs. The lower edge is nearly on a level with the third lumbar spine. A horizontal line through the umbilicus is below the level of the edge of each kidney. The right kidney, owing to its shape, and not to the liver, is a little lower than the left. The hilum, which is the objective point for the surgeon, is practically opposite the first lumbar spine. The position of the colon is of practical importance. It lies anterior to the kidney, therefore renal tumors are nearly always resonant. We should also remember that in the layer of peritoneum which passes backward from the colon, forming the mesentery, lie the vessels which supply the colon. Injury to these in removing a renal growth may be followed by impairment of the vitality of the gut. Of special importance are the structures which enter the hilum; here the blood vessels, the artery, and vein lie. The duct of the kidney passes out at this portal. The relation of these structures to each other is given variously by different authors. No doubt Morris is correct when he places the renal vein in front, the ureter behind, and the artery between. Another point of much practical importance has been specially emphasized by Jordan Lloyd: That the ureter instead of possessing a common pelvis then dividing into superior and inferior pelves may enter the sinus by four or five different ducts. The difficulty of detecting a calculus under these circumstances one can well imagine.

A momentous question presenting itself in renal surgery is the effect of anesthetics upon the kidney. Many deaths occurring in the first few days after operation upon other parts of the body are attributed to ether. I have myself made use of this excuse conscientiously. Only recently one of the most successful surgeons in Ohio told me that in his surgical experience he could recall at least eight cases in which he believed that death was due to the effect of ether on the kidneys. A careful study of this question I do not think will substantiate so serious a charge against ether. Properly given, with the patient well protected from cold and exposure, I believe it absolutely safe, possessing no deleterious influence upon the healthy or diseased kidney.

Robert Wier expresses my views most admirably upon this subject. In the *New York Medical Journal*, Vol. 12, his conclusions are: "1. Ether has no perceptible effect upon the healthy kidney. 2. That it is not dangerous in persons who have slight disease in both kidneys. 3. That the subsequent effects in the disturbance of circulation of the kidneys are transitory and quickly disappear." Butter, in 500 cases of ether narcosis, found albuminuria only once, when none had existed previously. Korti concludes, after an examination of 600 cases, that ether does not aggravate a diseased kidney, but that chloroform does. Garry says slight pre-existing kidney trouble is not increased by ether, and he does not believe that nephritis will follow etherization. Wunderlich says that both ether and chloroform will augment an existing albuminuria, but that chloroform has more than twice the deleterious action of ether. These are recent studies upon this question, and satisfactorily settle in my mind the comparative harmlessness of ether. In those cases of suppression of urine which I have had to follow operative procedures, I am confident some other factor was at work, other than ether narcosis. Therefore all things being equal I prefer ether as an anesthetic.

In all operations upon the kidney in which its removal is not contemplated, I prefer the horizontal or cross cut. I know that this incision is not the one usually chosen, but such operators as Harrison, J. Wm. White, Kocher and Henry Morris prefer it to the oblique incision. The cross incision for exposing the kidney, to avoid repetition, may be here indicated as beginning on the prominence of the sacro-lumbar muscle, and extending forward under and paralell to the twelfth rib, to the anterior axillary line. This incision should be one-half inch below the border of the twelfth rib, and of sufficient length to allow ample manipulation. The direction of this incision meets all the requirements of what Kocher calls a normal incision, and accords with Langers' cutaneous line. By it we particularly avoid injury to the vessels and nerves. If care is observed the twelfth intercostal nerve and its concomitant thick vessels may be seen, and protected. The first lumbar, the ileo-hypogastric, is in danger if the oblique incision is chosen, but in this method it lies deep and behind.

In this presence it is scarcely necessary even to allude to the

importance of protecting the nerves in the field of operation. At the lateral margin of the quadratus lumborum, under the lumbar fascia lies the abundant retrorenal, loose, adipose tissue, which is easily separated with the finger. This capsula adiposa retracted, we can by bimanual efforts bring the kidney into view. Should nephrectomy be the operation contemplated, there are other questions to be considered beyond the mere exposure of the kidney, therefore we will for the present defer the consideration of the technique of nephrectomy.

With the advance of abdominal surgery and the perfection of aseptic technique many of the diseased conditions of the kidney hitherto unrecognized, or considered incurable, have come within the legitimate domain of renal surgery. To-night we will consider movable and floating kidneys, pyonephrosis, renal calculi and injuries of the kidney. Upon some future occasion the subject of tumors of the kidney should receive the attention of the Academy. A movable kidney should be distinguished from a floating kidney; the former is shut off from the peritoneum, but enjoys considerable latitude of mobility within its capsule. This condition is an acquired one, a result of absorptive changes, internal or external violence; a floating kidney is covered entirely by peritoneum, is attached to the abdominal wall by a re-duplication of that membrane forming the mesonephron. This is always a congenital condition. The etiology of movable kidney is not entirely clear. It is much more common in women than men. Parturition, unquestionably, occupies a causal relation to it; the subsequent relaxation, the loss of intra-abdominal pressure, the forcible contracting diaphragm in labor, are all factors in its production. Symptoms: Oftentimes this condition is found at autopsies, having existed to a surprising degree without the knowledge of the patient. At other times, the slightest displacement gives rise to symptoms. These are a sense of weight and dragging in the loin, occasional movement, which is likened to the fœtus in utero. Colicy pains in the side, sensations of flatulency, nausea, vomiting, perhaps jaundice; these symptoms are aggravated by exertion or fatigue, and may be explained almost entirely by pressure and traction upon the duodenum, which in turn affects the bile ducts. The urinary symptoms are significantly associated with the above phenomena; there is usually an alteration in the quantity of urine, there may be entire suppression.

There is usually marked diminution of the amount of urine voided; there is no albumin or pus. The physical signs of movable kidney are of more diagnostic value than the symptoms. The presence of a movable tumor, somewhat kidney shaped, rather hard, tender upon pressure, yielding a peculiar sense of nausea or pain when manipulated, a muffled resonance upon percussion, susceptible of reduction under the rib, and absence of normal resistance in the flank, are the signs usually present in movable kidney. Yet there are times when all the symptoms appear to be greatly intensified, the tumor becomes large, soft and elastic. The dyspeptic symptoms pronounced. There is tympanic distention of the abdomen, great local tenderness, and, as before mentioned, accompanying these, partial or entire suppression of urine. These periodical attacks are styled Bruce Clark's syndroma or Dietal's crisis, and they are explained by the partial rotation of the kidney upon its pedicle, arrested circulation, occlusion of the ureter and the development of a temporary hydronephrosis. Should the attack pass off by a free discharge of lympid urine, the diagnosis is almost certain.

I cannot leave this question without emphasizing the dyspeptic symptoms, which are oftentimes the only phenomena of movable kidney. They have long ago been explained by Bartel upon a rational and anatomical basis. The kidney is pushed forward and inward, pressing upon the descending portion of the duodenum, which, being fixed for want of mesentery at this point, is compressed; hence the stomach contents are not allowed to pass. In the examination of abdominal tumors we should always bear in mind the possibility of the tumor being a movable kidney, yet in this day when movable kidneys seem to be somewhat the fashion we are more likely to mistake something else for a movable kidney. I think it proper to draw the differential diagnosis between this affection and distended gall bladder, and to remind you that for anatomical reasons they are likely to exist simultaneously, and I cannot do better than borrow in this connection from J. Wm. White. Both enlarged gall bladder and renal tumor may present as movable tumors in the right hypochrondriac and umbilical regions, either tumor may be somewhat reduced, both tumors may be hard or elastic and smooth; both may be very tender, the shape of the tumors may resemble closely;

both may be resonant or dull, both give rise to dyspeptic symptoms, nausea, vomiting, flatulency and some times jaundice; both give rise to paroxysmal colic; in gall bladder these attacks are due to the impaction of calculus in the duct; in the kidney the colic is due to the constriction of the pedicle. To distinguish them, remember that the gall bladder is more superficial, is usually dull upon percussion, and that dullness is continuous with the liver. The kidney has a muffled resonance. A gall bladder when distended can always be felt, a movable kidney cannot. Variation in the amount of urine attends Dietals' crisis, the sudden reduction of the tumor following a copious evacuation of urine is quite diagnostic of movable kidney. There is greater latitude of mobility for the kidney than is allowed the gall bladder. We should not attach too much importance to any fancied absence of the kidney or loss of resistance in the lumbar region, remembering that the kidney is well covered by the ribs. The question of treatment of a movable kidney depends entirely upon the severity of the symptoms. Palliative measures are entirely useless. A diagnosis being made and the symptoms demanding relief, the operation of nephrorrhaphy should be performed. The only point I wish to emphasize in the technique of this operation is that I think we should nick the capsule of the kidney, and peal off from its convex or outer border an area sufficiently large to anchor the kidney to the lumbar fascia with sutures, which should pass through the capsule and the parenchyma of the kidney. If the operative technique has been perfect, the wound may be closed without drainage. Nephrectomy is not justifiable for simple movable kidney.

### FLOATING KIDNEY.

Floating kidney is a very rare deformity. There are a few cases upon record, the authenticity of which cannot be disputed. I do not deem it of sufficient importance to consume our time further than to say that a kidney with a mesonephron is so likely to become the seat of disease, its ablation would be perfectly justifiable.

### RENAL CALCULI.

The impaction and retention of stone in the kidney and its surgical treatment will now receive our attention. The tendency

to form a renal concretion is obscure in its etiology, the only argument that one can advance to maintain its constitutional origin is that nephrolithiasis is oftentimes an inherited affection. It is more reasonable to consider it primarily a diseased kidney which fails to perform its function. If solid substances which are usually in a state of solution in the urine become excessive, little crystals are formed, and these crystals are cemented together by mucous or blood; arrested in one of the calyces of the kidney, or even in the uriniferous tubules, they grow by fresh accretion until attaining a size too large to pass by the ureter. The guiding symptoms of renal calculus are hæmaturia, pyuria, passage of fragments of calculus, vesical disturbance and pain.

The pain is of a dull aching character, increased by jarring or motion; it is usually more or less constant with intermittent attacks of violent paroxysms, the so-called kidney colic. The pain is intense, passes down the lumbar region to the testicle and down the thigh. It has a peculiar stabbing character, and some patients who are entirely in ignorance of their anatomy describe it as though there was something trying to squeeze its way along a narrow canal. Lumbago is too often looked upon as a neuralgic affection. It is often due to renal calculus. Hæmaturia is regarded by some as a pathognomonic symptom, yet you must know that it occurs from vesical calculus, tumors and a variety of constitutional conditions in which there is no kidney lesion. If slight in character, occurring simultaneously with the renal colic, it may be looked upon as additional evidence of the presence of stone and an indication that it is on the move.

Pus in the urine is of immense value, while not confirmatory of the presence of stone, if taken in connection with the above symptoms it is additional proof, and furthermore it warns us that infection has taken place through the urine, and the time for action has certainly arrived. The determination of the source of pus in the urine is one of the greatest achievements of modern surgery. The facility with which the ureters are catheterized and the urine from each collected for examination is surprising, and a conclusion reached after such acurate methods are employed is beyond dispute. The presence of a renal calculus produces by reflex irritability vesical disturbance. We may have incontinence or retention, or an irritable bladder. Cystitis is

also a frequent accompaniment. Marked diminution or suppression of urine is a symptom of significance. Anuria suddenly developing with lumbar pain, is in all probability more frequently due to renal calculus than any other cause. While these symptoms are briefly detailed, they are generally indicative of the presence of renal calculi, yet large stones almost filling the pelvis of the kidney have been found at the necroscopy, their presence never having been suspected during life. We must differentiate renal calculus from movable kidney. In the former, the hematuria and the pus in the urine are usually present. They are not found in movable kidney. The movable tumor can usually be felt in the loin. We do not have the same digestive disturbance that characterizes movable kidney. Perhaps the most difficult diagnosis to make is the differentiation of renal calculus from simple pyelitis, or inflammation of the pelvis of the kidney; this latter condition is, however, almost invariably a sequence of cystic inflammation, and a careful investigation into the history will elicit this fact. In pyelitis there may be severe colic due to plugging of the ureter with mucous and pus, yet one cannot say that these attacks are equal in severity to renal colic. And lastly, pyelitis is accompanied by a certain amount of systemic infection and we usually have septic fever.

The surgical treatment of renal calculus alone concerns us. The preliminary incision for the exposure of the kidney described in the beginning of this paper having been made, the kidney is brought into view. If this incision is not sufficiently large it may be increased by a second incision at right angles to it. The location of the stone may be determined by passing the finger in elevation of the adipose capsule and carefully palpating the kidney and its pelvis. If, by this method, we fail to locate the stone, and if it is imbedded in the substance of the kidney, and we may very likely do so, it is an entirely warrantable procedure to catch hold of the kidney and elevate it to the level of the wound, even outside the wound; this can be done without any great traction on its pedicle. The kidney should now be incised, the site of the incision is on the posterior and outer service above the pelvis. Kidney wounds heal much better when the pelvis is not opened. Into this incision through

the surface we can now introduce our finger and examine the pelvis of the kidney. I wish to deprecate the use of the sound for examining the kidney for stone. It is a dangerous instrument. The hemorrhage which is mainly venous is usually controlled by pressure. If a stone is found it should be removed, and the condition of the kidney carefully ascertained. It may be that the foreign body has wrought such destruction to the kidney structure that to leave it would not enhance the patient's chances of recovery, and would leave him afflicted with a suppurative sinus. Under these circumstances a nephrectomy should at once be undertaken. If possible, the operator should always ascertain before operating the existence of two kidneys and the condition of the one not operated upon. While this cannot be satisfactorily done in the male, it is a safeguard which we can always have when operating upon females.

## TREATMENT OF ACUTE ENDEMIC AND EPIDEMIC DYSENTERY OF HOT CLIMATES.*

BY Q. C. SMITH, M.D., AUSTIN, TEXAS.

As the cause of this form of dysentery is not satisfactorily known, our treatment of it should be empirical. The form of dysentery under consideration is quite a distinct variety of disease, and far more rapidly fatal in its tendency than sporadic dysentery of temperate climates; hence, demands more prompt and efficient treatment.

The great secret of its successful treatment is to attack the disease early; and when proper treatment is begun early, it is quickly and easily cured, if no serious organic disease preëxists. The great majority of cases of dysentery that occur in our Southern States, especially in the Southwest during hot weather, are of the type above referred to; and to this form only the following remarks on treatment apply.

Usually the first indication to be met is to relieve abdominal pains, especially the tormina and tenesmus of the lower bowel.

*Read before Travis County Medical Society, Sept. 3, 1896.

The best way to relieve such pain is, first, administer, hypodermically, atropia (for adults), 1-60 gr. with 2 to 4 grs. soluble quinine. If there be fever or headache, or both, administer (about one hour after the hypodermic), per orem, 3 to 5 grs. each of phenocoll and ammonol, with 2 or 3 grs. each fl. ex. leptandrin and fl. ex. gelsemium. This dose may require repetition once every twenty-four hours, to hold fever in abeyance. If terminal pains are severe, cleanse the skin over the entire abdominal region with hot water and soap, dry the skin and gently rub in a liniment made thus:

℞ Hydrate chloral.....
Camphor.....aa f℥ss
Mix et adde—
Fl. ex. aconite, rad.....
Ammonio ichthyol.....
Menthol.....aa f℥2
Opodeldoc.....q. s., ut ft f℥4. M.

S.—Apply freely over whole abdominal region, especially over the stomach and lower abdomen, and cover closely with thick, soft, damp, hot woolen or flannel cloths. Patient to have frequent small drinks of pure, plain, cool (not ice cold) water.

About two hours after the hypodermic, begin the administra- of ipecac, as follows:

℞ Fl. ex. ipecac.....fl℥i
Ess. ginger, or cloves.....gtt. 2
Elix. Lactopeptin.....fl℥2.
Mix. For one dose.

If ipecac be given as directed, it rarely causes emesis; but if emesis occurs, repeat the dose of ipecac immediately after its occurrence. These doses of ipecac should be repeated every eight to twelve hours, until the tormina and tenesmus have ceased, and the stools have become feculent and bilious. In mild cases, one or two doses of ipecac will usually suffice; severe cases may require several doses.

Patient should be kept well under the influence of atropia until all bowel pains cease and ipecac is no longer required, as atropia is the best remedy to ease or prevent dysenteric pains, prevent emesis, or to check bloody, dysenteric, alvine discharges.

Fl. ext. lepandrin, gtt. 2, and fl. ext. gelsemium, gtt. 2 to 4, and fl. ext. aconite rad, gtt. i, are each good remedies to eas e

or prevent torminal pains; these doses may be repeated every three to six hours, but always avoid large doses. These quantities may be combined in one dose, or each may be given separately.

If there be constipation (that we read about but see so little), then move the bowels freely with salines, phosphate soda, half ounce in dilute solution, every three or four hours, until free watery, alvine discharges; after which it is rare that purging medication need be repeated.

If the case has progressed several days, or lower-bowel pains be severe or persistent, then enemas, repeated two or three times in twenty-four hours, will comfort the patient and hasten the cure. These enemas should be medicated to meet special indications in each case. Four points of special care should always be observed in their use: They should be very warm, very dilute, introduced very gently, and very slowly. Of the many appropriate medicaments for the said enemas, would mention the following: Cocaine, ipecac, ammonio-ichthyol, boric acid, sulphocarbolate soda, soluble quinine, lactic acid, sassafras water, camphor water, waters made from such pine oils as pini pumilionis, pini picea, or oil cypress. The effect of such enemas are comforting to patient, and more curative than if they were medicated with astringents, or worse still, with opium; which drug should not be used in the treatment of dysentery, as its constitutional effect is injurious in this disease, and its analgesic effect can easily be dispensed with.

The best method of introducing enemas is, patient in Sim's position, hips little higher than chest, pass soft rubber, medium size, velvet-eyed, oiled catheter (oleate cocaine is best lubricant) far into the bowel by very gentle careful manipulation; then very slowly introduce the warm enema through the catheter. Should the bowel be irritable, aid its retaining power by firmly pressing a soft, very warm, damp cloth against the anus until the enema has been retained fifteen to thirty minutes. The volume of enemas may be 4 to 16 ounces; the large being more beneficial if well borne.

In addition to the foregoing treatment (which, of course, should be applied to meet the special conditions of each individual case), a pleasant tonic, given three or four times a day,

often adds to the comfort of the patient, and hastens the cure. The following is a good tonic preparation:

℞ Fl. ext. adrue.....f℥i
Arom. sulphuric acid.....f℥ss
Elix. Calasaya.....f℥ss
Elix. Pepsin.....q. s. ut. ft. f℥4
M. fl. sol.

S.—Large teaspoonful 3 or 4 times a day, preferably just after meals.

As to food. Patients may be allowed a small amount of food three times every twenty-four hours. All food to be eaten slowly, well masticated, and only one kind or class of food at any one meal. The best foods are good, fresh, well-ripened fruits, cooked or raw as the patient prefers, as apples, peaches, apricots, strawberries, raspberries, blackberries, and oranges; and fresh, well-cooked beef, mutton, or broiled bacon, meat soup, buttermilk, cream, fresh butter, toast bread and crackers, and fresh, well-cooked green salads. With the salads should be cooked a small seasoning of good bacon; and the vegetables, meats, and soups should be lightly seasoned with red pepper. Patients should remain quiet in horizontal posture until entirely recovered, and avoid imprudence in diet, or exposure to fatigue, hot or cold weather, for several days later.

Should a tendency to diarrhœa follow dysentery, the tonic heretofore mentioned, three times a day, with one or two drops fl. ext. columbo added to each dose, and three to five grains of sub-gallate bismuth, three times a day, will usually soon relieve the patient.

617 Colorado Street. Sept., 1896.

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If a person's temperature should be found to persist above 100° without any apparent cause, tuberculosis should be suspected and sought for.

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Sander & Sons' Eucalyptol Extract (Eucalyptol).—Apply to Dr Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

# ARTIFICIAL VESICO-VAGINAL FISTULA; SUBSEQUENT INTRA-PERITONEAL CYSTOTOMY FOR SUPPURATING PAPILLOMA, FOLLOWED BY FORMATION OF CALCULUS AROUND DEPENDENT PORTION OF SILK SUTURE; REMOVAL OF STONE AND CLOSURE OF FISTULA.

BY WILLIAM D. HAGGARD, JR., M.D.,

Associate Professor of Gynæcology in the University of Tennessee;
Late House Surgeon, Woman's Hospital, New York.

The above rather extensive heading is substantially the synopsis of the following case:

Mrs. A. S., æt. 41, was admitted to the Woman's Hospital, December 26th, 1895, in the service of Dr. Horace Tracy Hanks. She had been married seven years, with no children. One abortion three years previously, from which she had no subsequent trouble. Her general health had been good and family history negative.

In September, 1895, the bladder was opened through the vagina by her physician for an abscess (?) of the bladder. A Bache Emmet glass fistula tube was inserted which, at the time of admission, had become entirely occluded by the deposit of phosphates. The surety with which this occurs is a strong argument in favor of the operation of Emmet for the formation of artificial vesico-vaginal fistula in chronic and otherwise incurable cystitis. The simple approximation of vesical and vaginal mucosa by silver-wire suture constitutes one of the most perfect and satisfactory procedures in surgery. The results of this form of treatment are well known and pleasing.

In consequence of the occlusion of the tube her cystitis was aggravated. Urine showed abundant pus, mucus shreds and epithelial debris. Dysuria was marked and distressing, and the patient was aware of considerable pain in the right hypogas-

m. An enlargement in the right upper quadrant of the ›gastric region was appreciable to the patient.

)n January 1, 1896, under ether narcosis, the tube was d by enlarging the fistula with scissors and removed. As re stated, it was completely closed by phosphatic concretions. opening readily admitted the examining finger for vesical ex- ation. A hard, irregular tumor as large as a walnut was easily cted at the fundus. The bladder was thoroughly flushed normal salt solution, and the patient put to bed. The der was subsequently irrigated twice daily with a two per . boric acid solution and the patient put upon reconstruc- ɜ. January 29, 1896, supra-pubic cystotomy was performed Dr. Hanks, assisted by Dr. Talbot and the house-staff. ng to the inability to distend the bladder on account of the la, and also the location of the neoplasm, no attempt was e to open the bladder in the pre-vesical space, but abdominal on made at once. The growth which had previously been ped out from below, when brought into view through the ion in the fundus, had a peculiar cauliflower appearance, vas so fragile that it had to be removed piece-meal by Hun- sponge forceps. Remaining fragments were snipped away the entire base of the growth cauterized with a Paquelin ıo-cautery. The specimen was examined by the pathologist ə hospital, Dr. G. C. Freeborn and pronounced a suppu- papilloma. The bladder was closed with a continuous silk suture, and the lowest silk-worm gut sutures used in ɣ the abdominal incision also passed through the vesical n. The bladder was irrigated with salt solution and dress- ›plied. After the patient was in bed there was considera- ıing, which was finally controlled by vaginal tamponade, ›ur yards of sterilized gauze, and a tight abdominal com- ıpplied. The gauze was removed one yard at a time, the ming away at the end of the second day. The urine through the fistula and gauze. Bladder irrigation was d twice daily as before. The abdominal sutures were l on the seventh day. On the fifteenth day there was a emorrhage from the bladder during the night, which was ed after considerable difficulty with copious irrigation of olution, the temperature of which was gradually in-

creased to 118° F. The remainder of her convalescence was unnoteworthy and she was discharged Feb. 22. She was under periodical observation by Dr. Hanks, who in June detected a stone in the bladder and sent her to the hospital. She was very anxious to have her fistula closed. On June 17, the patient was made ready for the operation, and under ether, with the index finger introduced through the fistula I found the stone hanging by a thread from the site of the tumor. The opening would admit but one finger and the stone was so close to the anterior bladder wall, and so far forward that it could not be made to approach the fistula near enough for extraction by pressure on the abdominal wall.

At length a long Tait artery forceps was introduced through the urethra, the stone seized and brought out through the fistula. It was about the size of an almond shell and had formed around a short dependant piece of the black silk suture used to coapt the bladder wall. The remainder of the silk suture was removed, the bladder douched and the closure of the fistula deferred. The former site of the papilloma was noticeably smooth and free of enlargement and deposit.

On June 23rd, with the assistance of Dr. H. C. Coe, I closed the vesico-vaginal fistula after the manner of Emmet, employing twelve silver wire sutures. They were removed two weeks afterwards, union being perfect.

# Selections.

PROTONUCLEIN: CLINICAL REPORTS.—When this agent was first offered to the profession the claims made for it were so startling that doubtlessly many physicians at once concluded that it was simply another ephemeral fad, and not worthy of their attention or serious consideration, and passed it by. To those, however, who chose to investigate its merits it has proved itself one of the most pronounced successes of modern therapy. In theory it seemed plausible, in practice it is perfect. On account

of its peculiar relation to the entire organism the diseases in which it is applicable are so varied as to make classification impossible, but a few clinical reports from cases in practice will demonstrate its value and almost boundless range of usefulness.

REPORT OF CASES.

*Case I.*—Lady, aged 22, subject to periodical attacks of tonsillitis, which in almost every instance ended with abscess formation. Found her on the second day of the disease with tonsils greatly swollen, extremely painful and tender, pulse 118, temperature 102.4°. Gave her powders of the regular Protonuclein, aa, gr. iv, one every three hours, and directed her to allow them to dissolve in the mouth, so as to obtain local as well as systemic action, also left a saline cathartic. On my next visit, twenty-four hours later, found her feeling better temperature, however, still 101.5°, pulse 104. She said the pain was much less, and I noticed that the swelling was somewhat reduced. I ordered the same doses continued, and on my third visit found the temperature 98.8°, pulse 82; swelling was almost all gone, and there was no pain. She recovered fully by the fifth day, and was greatly enthused by the rapid cure, as on previous occasions she suffered from nine to twelve days.

*Case II.*—Chronic pleurisy. Lady, aged thirty-six, had an attack of pleurisy three years ago, which "left its mark," a constant stitch in the side. She had been treated for a period of four months with hypophosphites, syr. hydriodric acid, and other iodides and arsenic, without benefit, and abandoned all hope of ever regaining her former good health. At my earnest solicitation, however, she consented to give Protonuclein a trial, as I assured her that I had never given her anything in which I had so much confidence. I therefore gave her thirty-two tablets of Protonuclein, aa, gr. iij, one to be taken four times a day. On the tenth day thereafter she called, saying that if another box would benefit her as much as the first one did she would be well. I gave her forty-eight more tablets, this time directing one to be taken three times a day, and was gratified to learn that the pains had entirely disappeared before the entire number were taken. Although four months have passed, and winter at that, she told me recently she has had no recurrence of them.

*Case III.*—Typhoid-pneumonia. Male, aged 24. Con-

tracted pneumonia, which at the very outset developed typhoid symptoms. I did not think of Protonuclein at first, and treated him with the usual remedies. At the end of nine days I realized that the case was indeed a grave one, as he was very delirious, temperature from 102° to 105°, pulse 110 to 130. Physical examination revealed large areas of consolidation on both sides, cough severe, sputa largely mixed with blood; a severe form of diarrhœa set in, stools bloody, and very frequent. I gave him 4-grain powders of Protonuclein every three hours, quinia sulph., grs. 2, every three hours, and strychnia sulph., gr. 1-60, four times daily. The quina sulph. was alternated with the Protonuclein. The pallor, that was so prominent before, now gave way to a more natural color, delirium ceased, as did also the diarrhœa; the expectoration became more profuse, and the blood materially decreased; favorable changes in the pulse and temperature also took place. After the more serious symptoms had abated the dose of Protonuclein was reduced to three grains, three times a day, and was continued until the case was discharged, twenty-nine days after my first visit. The prompt and decided change that was at once apparent after I began the Protonuclein, together with the severity of the symptoms, convinces me that the case would have terminated fatally without it.

Other cases might be cited, but the length of this article precludes further detail. Suffice it to say that in diarrhetic diseases, renal or cystic catarrhal affections, and marasmus, I have had results with this agent that, I believe, could not have been obtained with any other preparation.—*J. D. Albright, M.D., of Akron, Pa., in Cincinnati Lancet-Clinic.*

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THE TREATMENT OF NEURALGIC AND RHEUMATIC AFFECTIONS.—In spite of extensive researches into the functions of the nervous system, we have not succeeded in obtaining precise and certain data concerning neuralgia. Austin thus defines neuralgia: "A disease of the nervous system manifesting itself by pains which appear to follow the course of certain nerves, ramifying sometimes into a few, sometimes into all the terminal branches of those nerves." What is of importance for us to know from its bearing on treatment, is the etiology and pathol-

ogy of this affection. In order that the functions of the nervous system may be normally performed, two conditions must exist, viz:

1. The integrity of the nervous system itself, its cells and fibres.

2. The integrity of the circulatory system.

* * * * * * * * * *

Another affection whose primal cause is often a matter of as much doubt as is that of neuralgia is chronic rheumatism. This is a term which is loosely applied to many ailments not really of rheumatic origin. Almost any obscure and obstinate pain which is not traceable to some other agency is apt to be attributed to chronic rheumatism. Under this head then there come to be ranked many aches and ailments, which not being of rheumatic origin have no claim to the title. Chronic rheumatism, properly so-called, is a milder form of the subacute variety in which there is not sufficient local inflammation to prostrate the patient or to raise the temperature. Just as the acute runs into the subacute, so the subacute runs into the chronic by the insensible graduations. It also exists independently of them. The malady is characterized by the occurrence of pains obstinate in nature, and sometimes shifting in character, affecting the joints, muscles and fibrous capsules. The affected parts may be somewhat tender to the touch, but are not, as a rule, distinctly swollen. The pain is increased by damp and cold. It often disappears in fair and returns in wet weather. It is a troublesome ailment which frequently lasts off and on for months, even years. During its continuance there is often laid the foundation of future cardiac troubles. In the age, in the personal and family history of the patient, in the shifting character of the pains, and in the occasional slight rise of the temperature we have the best means of distinguishing true chronic rheumatism from the other ailments, gouty, arthritic and neuralgic, with which it is often confounded. The treatment of neuralgic and rheumatic affections is both constitutional and local- For some time now I have been using the tongaline preparations in the treatment of these maladies and the results so far have been most gratifying. * * * *

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*—Dr. D. S. Maddox, of Marion, Ohio, in Med. Summary.*

HYDROZONE IN GASTRIC AND INTESTINAL DISORDERS.—A period of nearly twelve years has elapsed since I first began the clinical use of hydrogen dioxide, generally referred to at that time as the peroxide of hydrogen. In 1881 I published a paper giving a detailed account of several cases in which it had been employed by inhalation, but even then I was thirty years behind the report of Dr. (now Sir) Benjamin Ward Richardson, of London, who made a thorough investigation of its antiseptic, detergent, and healing properties. Notwithstanding the fact that this preparation had been known to the medical profession for that length of time it had achieved little or no reputation. This, however, may be explained by the fact that the discovery preceded the dawn of bacteriology. Indeed, I was one of the early contributors to medical literature relating to the clinical value of this product, and since that time I have published a number of articles, embracing practically every application, both medical and surgical, to which hydrogen dioxide is adapted.

In the present communication it is my object to direct the attention of the profession to its special value in the treatment of gastric and intestinal disorders. In gastritis, for example, there is no antiseptic which can be given with so much benefit as this remedy, because its effect is immediate, and even in considerable doses it is absolutely harmless. The same is true in regard to its employment in typhoid fever, cholera infantum, and Asiatic cholera. In the latter disease its efficacy has been thoroughly demonstrated by a number of well-known physicians, and its applicability in cholera infantum is well known to those physicians who have given careful attention to the most modern methods in the treatment of this class of cases.

The following brief notes will be sufficient to indicate the availability of this remedy in the treatment of the disorders already mentioned, although, in view of the fact that hydrozone is a more concentrated product, and withal a permanent solution, this latter remedy should have the preference. It contains at least double the volume of nascent oxygen which has heretofore been the standard for the medicinal peroxide of hydrogen.

In gastritis, either acute, subacute, or chronic, we have to deal with an unhealthy condition of the lining membrane of the stomach. The inflammation is attended with an increased out-

put of mucus, which seriously interferes with the normal functions of the peptic glands. By the introduction of a small quantity of hydrozone, in the strength of one part to thirty-two parts of boiled or sterilized water, this objectionable mucus is at once destroyed by the action of the oxygen which is released, and the contents of the stomach remaining are promptly discharged into the small intestine. A patient suffering from gastritis should take at least half an hour before meals two to four ounces of diluted hydrozone (one to thirty-two) and lie on the right side so as to facilitate the action of the stomach in discharging its contents.* The antiseptic properties of hydrozone thus used are sufficient to destroy the micro-organisms and leave the stomach in a healthy condition for the absorption of nutritive pabulum. All forms of fermentation are promptly subdued by the active oxidation resulting from the liberation of nascent oxygen. The patient is then in a condition to take suitable food, which should be nutritious and easily digested, liquids being preferred until the active symptoms have subsided. Later, small portions of solid food can be ingested, but all food stuffs of a starchy character must be thoroughly masticated, in order to secure the action of the salivary secretion upon the starch granules, breaking them up, and lessening the tendency to fermentation in the stomach. After taking a meal, a patient with gastritis should follow it with medicinal doses of glycozone, which contains, in addition to the nascent oxygen contained in hydrozone, a percentage of glycerin which favors osmosis and assists in re-establishing the functional activity of both the peptic and mucous glands of the organ.

In the treatment of cholera infantum, typhoid fever, and Asiatic cholera, the same general plan should be adopted in dealing with the stomach, always bearing in mind the necessity for having the patient remain in the recumbent position and on the right side for at least half an hour after the ingestion of the

*In chronic cases with a large output of gastric mucus, and particularly in gastric ulcer, concentrated solutions are not well borne at first, owing to the formation of gas, but this difficulty disappears with the continued use of the remedy, and no treatment of gastric ulcer can be regarded as complete without the local employment of hydrogen dioxide or hydrozone.

solution. In addition, however, to the preliminary treatment of the stomach, the same solution (one to thirty-two) is used as an injection into the lower bowel, care being exercised to insure its introduction as high up as possible. This can be managed by having the patient lie on the left side, with the hips well elevated, and the employment of a long, flexible rectal tube. In this manner we secure and maintain an antiseptic condition in both the stomach and large intestine, the importance of which will be understood when we consider the large number of micro-organisms which grow under these favorable conditions with such remarkable rapidity.

When deemed advisable, the solution introduced into the lower bowel may be combined with large quantities of either hot or cold water, which enables us to obtain the benefits of irrigation to the antiseptic effects. These irrigations may be employed as frequently as deemed advisable by the medical attendant, but they will usually prove satisfactory if administered at intervals of four hours.

Although brief, it is believed this communication will prove serviceable to a large number of practitioners who have hitherto found serious difficulties in counteracting the mephitic influences of bacteria in this class of disorders, and the clinical virtues of the remedy being now so fully recognized, no one will hesitate to adopt the methods suggested, which may conveniently be carried out in addition to the usual routine treatment. —*John Aulde, M:D., in N. Y. Med. Jour.*

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THE USE OF DIPHTHERIA SERUM IN OZÆNA AND CHRONIC PURULENT OTITIS.—In the *Therapeutische Wochenschrift* for July 26th, Professor Gradenigo, of Turin, gives an outline of the researches made since Fränkel's in 1882, into the ætiology of ozæna. He accepts the theory of its infective character and recognizes Belfanti's bacillus as its cause. On account of the close resemblance, in effects, between this bacillus and that of diphtheria, he has used the antidiphtheritic serum in thirty-two cases of ozæna. Sixteen of them were practically cured; that is, they were mitigated to the extent that the formation of crusts and the fœtor disappeared. In other cases there was tangible

improvement. Most of the patients had had the disease for a long time and had tried other treatment without avail. In the cases that were approximately cured, the duration of the treatment varied from thirty to sixty-eight days, and the number of units of serum employed in an individual case ranged from 5,200 to 27,200. In all the cases œdema at the site of the injection, urticaria, etc., followed after a certain number of injections had been used, but they were of brief continuance. In the sixteen cases that were cured, the duration of the treatment was from fifteen to seventy-two days, and the number of injections was from four to thirty-five, the number of units of serum used being from 5,200 to 48,000. Mild local or general reaction symptoms occurred in almost all these cases, and attacks of bleeding from the nose were observed.

Professor Gradenigo has employed the same treatment in two cases of chronic purulent otitis, or, rather, it happened that two of his ozæna patients were affected with the ear disease also, and the serum treatment was observed to have a very favorable effect upon it. He considers Belfanti's discovery of the bacillus of ozæna not only of great practical benefit as leading to a successful treatment of the disease, but also of much importance in general pathology.—*N. Y. Medical Journal.*

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THE HYPNOTIC EFFECT OF PELLOTINE.—Prof. F. Jolly reports his clinical tests with Pellotine muriate (the new hypnotic introduced by Dr. Heffter, of the Pharmacological Institute of Leipzig, and manufactured by C. F. Boehringer & Soehne, of Mannheim) in the *Therapeutische Monatshefte*, June, 1896. He employed Pellotine muriate, preferring this salt on account of its ready solubility in water; his experience covers forty cases at the Charitè Hospital of Berlin. In one-half of these cases the drug was administered during the day, either by mouth or subcutaneously; doses of $\frac{1}{3}$ grain (0.02) caused languor and sleepiness in quiet patients, but usually this effect followed only after 3-5 to 9-10 grain doses—causing several hours' sleep within $\frac{1}{2}$ to 1 hour after administration. In some cases the pulse rate was decreased, in others not at all, and only at the beginning of sleep. In painful affections (lancinating pains in tabes, neuritis and ischias)

sleep was also induced, but an anesthetic effect was only occasionally noted before and after sleep. In excitable and delirious patients, the above mentioned doses were insufficient; even 2 grain (0.12) doses did not produce sleep, but had a calming effect—lasting all day—on the patient.

In twenty cases the drug was administered at night as hypnotic, and ¾ to 1 1-5 grain (0.05—0.08) doses were found to equal in effect 15 grains of trional or 22 to 30 grains of chloral.

Of side-effects, excepting the inconsiderable slowing of pulse-rate, a few patients exhibited giddiness and a feeling of unrest before sleep ensued; a few also complained of similar feeling upon awakening in the morning. In several cases the hypnotic effect was not produced, but in these other hypnotics had also proved ineffectual. In no instance were serious side-effects noted.

The author then quotes six typical cases from his records, in which four, one and five hours sleep were induced in three cases; one slept through the night for three consecutive nights; one slept peacefully through the night, while otherwise her rest had been frequently broken; and one slept fairly well—although there occurred two periods of wakefulness.

Prof. Jolly's report is generally favorable, and he concludes that he will continue the use of this new agent and will render an additional report after more extended trials.

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The Treatment of Hemorrhoids.—Dr. Claude Dunmore has an interesting article on the treatment of hemorrhoids in *Matthew's Quarterly*, in which he presents the following conclusions, based upon a large correspondence with American surgeons:

1. The ligature is the safest method, as there is less likelihood of its use being followed by hemorrhage, stricture, or ulcers.

2. The clamp and cautery causes less pain and a shorter convalescence, but hemorrhage and stricture of the rectum may very often follow its improper application.

3. Whitehead's method should be limited to those cases in which the entire circumference of the anus is involved. In ordi-

nary cases of one or more hemorrhoids it should never be used.

4. Simple dilatation of the sphincter, injection of carbolic acid and Manley's method are merely palliatives.—*Gaillard's Medical Journal.*

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PERICARDITIS BY OPEN INCISION.—Rullier (*Arch. de Med. et de pharm. Militare*). A soldier suffered from pericarditis. Four times the pericardial cavity was tapped and the fluid withdrawn. After the fourth aspiration a solution of iodin was injected. The fluid reappeared as before. Rullier determined to treat it as a hydrocele would be treated under similar circumstances. Under cocaine anesthesia, an incision was made in the fourth intercostal space, and the pericardium opened and drained. The following day the serous secretion was profuse, but it rapidly diminished, and the pericardial wound had closed by the fourth day. Recovery was delayed by a left-sided bronchopneumonia, but was eventually completed.—*Med. News.*

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ASTHMA.—A combination of Dr. Pepper's is:

| | | |
|---|---|---|
| ℞ | Ammon. brom. | ʒ viij |
| | Ammon. Chlor. | ʒ iss |
| | Tinct. lobeliæ | f. ʒ iij |
| | Spir. æth. comp | f. ℥ j |
| | Syr. acaciæ | ad. f. ℥ iv |

M. Sig.—Dessertspoonful in water every hour or two during paroxysms.—*Prescription.*

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FRAGRANT ANTISEPTICS.—In cases of foul smelling cancers, etc., the odors are completely disguised if the room and bed are well sprayed with a mixture of alcohol, 500 gr., essence of thyme and essence of lavender, 50 gr. each. This agreeable disinfectant also possesses powerful antiseptic properties. Huchard recommends a similar antiseptic spray for the apartments of tuberculous patients: guaiacol, 50 grams, eucalyptol, 40, phenic acid, 30, menthol, 20, thymol, 10, essence of cloves, 5, and alcohol at 90 degrees, q. s. to make one liter.—*Gaz. Med. de Liege*, August 20.—*Journal of the American Medical Association.*

THE SURGICAL TREATMENT OF EXOPHTHALMIC GOITRE.—Since extirpation of the enlarged thyroid gland was first practiced in 1880 for the relief of the symptoms of exophthalmic goitre the subject of this operation has been a matter of considerable discussion. Some authorities would operate in almost all if not all cases; others would be as sweeping in the limitation of surgical intervention; while still others would be governed by the urgency of the symptoms referable to the thyroid gland—as a result either of pressure or of intoxication due to failure of function. According to the latest dictum the cases most suitable for thyroidectomy are those in which psycho-neurotic symptoms predominate and which have resisted other therapeutic measures. To the not yet large number of cases operated on Berndt (Archiv für klinische Chirurgie, No. 4, 1896.) adds two more, in one of which a perfect cure was effected, while in the other only improvement resulted.

The successful case occurred in an unmarried woman, sixty-five years old, in whom palpitation of the heart followed emotional disturbances at the age of thirty-five years. Shortly afterward a pulsatile swelling made its appearance on the left side of the neck. Subsequently the diagnosis of exophthalmic goitre was made by a distinguished clinician, despite the absence of exophthalmos. Later in the history of the case the woman suffered from violent attacks of delirium cordis, characterized by tachycardia, with a sense of anxiety and of oppression, and followed by sweating. As time went on, symptoms of melancholia, with suicidal tendencies, made their appearance. Varied treatment had been employed at different times, but without avail. When finally operation was proposed the woman readily assented. Accordingly, the enlarged left lobe of the thyroid gland was removed, together with a nodule of considerable size that was found in the anterior mediastinum. The right lobe of the gland was not enlarged, nor was the trachea compressed or softened. Following the operation the pulse progressively diminished in frequency to the normal and the other symptoms gradually disappeared.

The second case occurred in a married woman, fifty-eight years old, in whom palpitation of the heart developed at the age of twenty-five years in the train of hard work. The patient had

always been irritable. In the course of two years swelling of the neck made its appearance. The skin became pigmented and the eyes protruded. The patient complained of sleeplessness, of a sense of fear, of restlessness, of dyspnœa, and sweating. After ten years of unavailing medical treatment an operation was readily agreed to. Both lobes of the thyroid gland were enlarged, the left, however, in greater degree, but the trachea was not affected. The left lobe and a retro-sternal nodule that was found were removed, but failure of the heart necessitated premature termination of the operation. The condition of the patient was greatly improved after the operation, but death resulted a year later from pneumonia complicating influenza.

Berndt looks upon exophthalmic goitre as a reflex neurosis originating in the irritation resulting from the torsion, traction, and compression of the sympathetic nerve endings in the thyroid gland due to the morbid changes in its structure. These conditions are removed by thyroidectomy and with the removal of their cause the symptoms likewise disappear.—*N. Y. Medical Record.*

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FEMORAL HERNIA; OPERATION.—In operating for femoral hernia I make the "U"-shaped incision, as it gives a much larger field for operation than any other.

We find the sac occupied by the omentum, which is adherent. We will transfix the omentum after separating it and tie in halves with silk. I prefer silk in ligating the omentum because you can use sufficient force to displace the fat beneath the ligature, thus more effectually interrupting the circulation. We ligate the sac separately with catgut. I will close the femoral opening by elevating a semilunar flap from the surface of the pectineus muscle, which is sutured to Poupart's ligament. This closes the opening very effectually, and the amount of scar tissue formed immediately below this flap assists in effectually and permanently closing the femoral opening and canal.—*Senn's Surgical Clinic, in Chicago Clinical Review.*

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THE THERAPY OF THYREOIDIN.—Dr. E. Le Jeune writes in the *London Therapist*, June, of the uses of thyreoidin in myxoe-

dema, obesity, and the like. In reference to epidemic cretinism he refers to the observations of Bruhns, who has stated that the greater proportion of patients having goitre are amenable to thyreoidin treatment; with cure in eight per cent. In one-third of the cases there was a moderate diminution of the tumor, while in another third the reduction was considerable.

The report continues:

Relapse can be avoided by giving small doses at definite intervals. Serdpine also publishes the following conclusions: (1) The active principles of the thyroid gland in a certain number of cases diminish simple goitre, hyperplasia, and the gland recovers its normal size. (2) The action of the drug is not directed solely to the diminution of the tumor, but also regulates the troubled nervous system.

The loss of weight, frequently noticed by observers at the commencement of thyreoidin administration, has led to the trial of the drug for the diminution of fat in obesity. Leichtenstein and Wendelstadt obtained positive results in 24 out of 27 obese persons. The loss of weight during several weeks' treatment varied between 3½ and 21 pounds; in some cases as much as 56 pounds loss has been observed.

Thyreoidin treatment is also being tried at the present time in the treatment of emaciated conditions, and has met with more or less success in other maladies, such as epilepsy, psychosis, acromegalia, rachitis, etc.

The best mode in which the drug may be administered is a most important question. As already mentioned, it has been prepared in a variety of forms, mostly more or less crude. The most advanced and most practical form is that of tablets containing a definite quantity of thyreoidin in place of the glandular substance.

The average dose for adults in six tablets of four grains each *pro die*, and for children three. No bad symptoms follow this form of administration, except that, of course, if the treatment is long continued, signs of direct action on the nervous system may be expected, and indicate necessity for temporarily stopping the drug. These signs are, however, rarely met with in the ordinary course, and the above mode of thyreoidin treatment exercised with prudence is at once the simplest and least dangerous. —*American Therapist.*

PHYSICIANS SHOULD WORK LESS.—Dr. Kortright, in the *Brooklyn Medical Journal*, says that arterial sclerosis is a common cause of death in physicians. The lesson that we should learn from our deceased colleagues, he states, is not to work too long. When you find your arterial tension increasing, your temporal artery becoming tortuous, your radial growing hard, especially if you have a little palpitation and pass an increased amount of limpid urine, whatever your years, know that old age is upon you. Henceforth shape your life like one that is old. Curb your ambition. Be content with a small practice. Reduce your expenses. Give up your night work. Decline confinements. Take a long vacation in summer. Retire early. Eat abstemiously. Drink not at all. Sell your horse. Take a great deal of moderate exercise in the open air. Watch the functions of the skin. Guard against a chill. Cultivate an even disposition. Study to be quiet.—*New York Medical Record.*

(How easy to give—how difficult to take good advice.—ED. S. P.)

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ALCOHOL IN CANCER.—Hasse, for more than twenty years, has used injections of alcohol in the treatment of inoperable cancer, and he reports four cases of this kind as permanently cured, He uses the same method in cancer of the breast, and believes that cure can be effected by surrounding the breast with cicatrical tissue by means of alcohol injections. It is preferable, however, to extripate the breast, and treat recurrences by the injections. In this manner he obtained radical cure in a case declared inoperable by Volkmann.—*La Semaine Medicale.*

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

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AN EFFECTIVE HEART STIMULANT.—A hot-water bag over the cardiac region· it is especially valuable in threatened heart-failure.—*Med. Age.*

THE FEVER OF TUBERCULOSIS.—In the *Jour. de Med. et Chir.* is a good review of Dr. Chretien's investigations upon the pathology of fever in cases of tuberculosis.

The fever of tuberculosis can be distinguished into two species. The first is the fever of granulation. This is the fever of a simple inflammation, and is caused by the inflammatory extension of the tuberculosis.

The second variety is the fever from absorption or hectic fever. This is the fever of advanced epochs of the disease, and it is a saturation and poisoning of the body by the accumulation of septic products in the tissues, and especially in the cavities.

M. Chretien distinguishes six types of fever: Initial subjective fever, subfebrile state, continuous fever, remittent fever, hectic intermittent fever and irregular fever.

Under the denomination of initial subjective fever the author designates a state of great malaise, weakness, fatigue, and with a constant subjective sensation of excessive heat, while the use of the thermometer will show there is no fever. This is termed by the author subjective fever, for all the signs of pyrexia are present except an elevation of the temperature. This febrile sensation comes on in the afternoon at 4 or 5 o'clock.

The author has drawn some important conclusions:

1. The total absence of fever in a tuberculous patient is proof of the arrest of the disease.

2. A sub-febrile state indicates, not an arrest, but a very slow progress of the inflammation.

3. If the fever has diurnal oscillations, at the same time remaining remittent or continuous, the course of the disease may be said to be grave.

The author has extensively studied the so-called hectic fever in order to find its origin—whether it is caused by the tubercle bacillus alone or by the many other organisms, notably streptococci, which are always present in great abundance.

From his numerous experiments the author has concluded that the fever is caused by the absorbed toxines of all the microorganisms. Hectic fever is, therefore, an absorption fever. The contents of the cavities are very toxic, and their absorption causes fever.

The study of the toxicity of the urine supports this theory.

When the hectic fever is highest there is a considerable diminution in the co-efficient of toxicity of the urine.

The toxicity of the urine coincides with the accumulation, in the organism, of the products of incomplete oxidation. This accumulation of extractive matter is in lieu of the fever.

The fever of tuberculosis is caused by intoxication. In the first period it is entirely due to the toxines of the tubercle bacillus. In the later periods, with the hectic fever, the cause is to be found in the products of the numerous micro-organisms associated with the specific germ.—*Medical Review.*

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THE IMPORTANCE OF THE PRESERVATION OF MOTOR NERVES IN OPERATIONS.—To Kocher, in his "Operative Surgery," we are indebted for emphasizing the importance of preserving the motor nerve supply of the region of an operation, and for devising a series of incisions located so as to meet this end. He points out the fact that cutting through a muscle which can be reunited, leaving no permanent defect other than an *inscriptio tendinea*, is a light matter as compared with severing its motor nerve supply and thus causing atrophy. In the abdomen, he observes, the long vertical incisions external to the rectus muscle favor the development of hernia by causing paralysis of this muscle.

In making an incision upon the face, one must think first of all of its relation to the facial nerve and its branches; for what more serious injury could one produce upon the face than paralysis of a large group of the facial muscles, to say nothing of the result of cutting the main trunk of the nerve!

In all operations one should, in locating his incision, have at least as great regard for the location of the motor nerves as for the location of the vessels, these two factors taking precedence over the possibility of involving a muscle and the correspondence of the incision with the cleavage lines of the skin, it being a fortunate circumstance that in a majority of cases the latter coincide with the direction of the motor nerves.

Not only in the location of the skin incision should the nerves be borne in mind, but also in working in the deeper structures. In resection of the elbow joint, for instance, the most important structure to be avoided is the ulnar nerve. Nerves likely to be

overlooked are the spinal accessory, when operating in the posterior cervical triangle, the severance of which results in drooping of the shoulder, through paralysis of the trapezius muscle; and the long subscapular nerve in the axilla, which supplies the latissimus dorsi.—*Charlotte Medical Journal.*

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COCAINE APPLIED TO THE MUCOUS MEMBRANES OF THE NOSTRILS A SPECIFIC FOR NAUSEA.—That the application of a 2-per-cent. solution of cocaine will almost instantly, in the majority of cases, relieve nausea, I discovered accidentally about one year ago, and my experience since that time shows it to be a very reliable remedy, if not a specific, for this distressing and often serious symptom. The efficacy of this treatment is easily explained on a strictly physiological basis. That there is a distinct nervous association between the olfactory nerves and the nerves of the gastric mucous membranes is repeatedly demonstrated to the every-day observer. Repulsive odors inhaled are oftentimes reflected to the stomach, causing a sensation of nausea, which usually is immediately relieved as soon as the exciting cause is removed. In naso-pharyngeal catarrh, the secretions and accumulations cause much retching and frequently vomiting when the passages are "cleared out." As a third instance of the close reflex association may be mentioned the observations of a certain surgeon who claims that applications of cocaine to the nasal membranes just previous to and during anesthesia will relieve the patient of many unpleasant accompanying and after effects, particularly gastric disturbances. A fourth instance, though not always present, may be mentioned—the tendency to digestive disturbance during attacks of hay-fever or hay asthma.

However we may attempt to explain this positive relief of nausea following local anesthesia of the nasal membranes, the clinical fact that it does prevent and relieve the condition is sufficient evidence for its employment. As in the use of cocaine for the relief of other painful or annoying conditions, great care should be exercised to protect against the well-known danger of idiosyncrasy, as well as to protect against subjects acquiring the habit, particularly if its use were to be long continued. It would be advisable, where the use of the remedy must be often repeated,

for the physician to personally administer the applications a few times, to become assured of its results and to observe any idiosyncrasies, as well as to instruct the patient as to how much and how to use it. It would also be advisable for the physician not to inform the patient of the nature of the remedy other than that it was a poison and must be used with great care. I believe the results that may be obtained from the use of cocaine for the relief of nausea will prove of more than ordinary value in the treatment of obstinate vomiting of pregnancy, and may even be of more value in those morbid conditions of the stomach in which vomiting is not only constantly threatened, but in which vomiting does great harm. Doubtless the strength of the solution will have to be varied to meet the requirements of individual cases, but for ordinary cases I have found a 2-per-cent. solution to have the desired effect. The effect will usually last for several hours.

For the reason that the filaments of the olfactory nerves are distributed principally in the mucous membranes covering the *upper* third of the septum of the nose, the superior turbinated, the *upper* third of the middle turbinated, and the upper part of the nasal cavities beneath the cribriform plates and ethmoid bones, it is advisable that the applications of cocaine be forced well up into the nasal passages. If applied only over the lower part of the membranes, or the "breathing portion," which is not connected with the sense of smell, it is doubtful if any effect would follow. The accessory cavities or sinuses communicating with the nostrils are not all associated with the sense of smell. Therefore, if the cocaine spray is forced well up into the nasal passages, effecting complete anesthesia of that portion of the mucous membranes governing the sense of smell, complete and more or less lasting relief of a prevailing attack of nausea may be expected to follow in nine cases out of ten.

It would be interesting to know more of the exact effect of this temporary suspension of the functions of the olfactory center upon the gastric center.—*Chas. W. Ingraham, M.D., of Binghamton, N. Y., in American Medico-Surgical Bulletin.*

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Vital Statistics of Diphtheria in London.—At the last meeting of the British Medical Association, Dr. F. A. Dixey, of

Oxford, read an interesting paper on this subject. The most interesting question in the paper was that of the effect of the antitoxin treatment of this affection. On this point the general conclusion reached by the author in a former paper was fully maintained, and he asserted that the diphtheria mortality of the metropolis had received a considerable check which it was difficult to attribute to any other cause than the introduction of the serum treatment. We quote *verbatim* from the paper the following:

"Comparing together the average weekly number of deaths for the last five years, we find that after rising from 26.2 in 1891 to 36.2 in 1892 and 62.8 in 1893, it fell to 51.4 in 1894 and 44.5 in 1895. It is true that the opening months of 1895 promised a greater diminution than that exhibited by the figures for the whole year, and that the intensity of the rise last autumn seems to show that some other factor than the antitoxin treatment must have been concerned in the diminished mortality at the end of 1894; but notwithstanding these facts, which are freely admitted, it would seem that the general run even of these figures suggests a conclusion favorable to the efficacy of the treatment. This conclusion becomes strengthened if, in place of the actual number of deaths, we consider what is of course a truer test of the matter at issue—namely, the case mortality, or relation of deaths to notifications. Under this head the main facts are as follows: The number of cases notified during 1893 was 13,694; of deaths during the same year 3,264; giving a case mortality of 23.8 per cent. In 1894 the corresponding figures were 11,190 and 2,674; the case mortality stood, therefore, at 23.9. In 1895, however, while the notifications rose to 11,229, the number of fatal cases fell to 2,289, and the case mortality was therefore only 20.4 per cent., the lowest rate for the whole year yet recorded. The numbers for the first half of the present year are respectively 6,193 cases notified, and 1,239 deaths, which work out to a case mortality of 20.2 per cent. In view of the fact that quite irrespective of the number of cases, the case mortality of the last half of the year is invariably below that of the first, it may fairly be anticipated that by the end of 1896 the year's case mortality will for the first time on record have sunk below 20 per cent. This diminution in case mortality,

which appears to be still in progress, represents the annual saving of some hundreds of lives, and I may be allowed, in conclusion, once more to repeat that it is difficult to see what cause can have been at work during the last two years in producing so marked a result, unless it be the treatment by antitoxin."—*The Journal of the American Medical Association.*

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HYDROGEN DIOXIDE AND SALINE SOLUTION.—Dr. Robert T. Morris (American Medical and Surgical Bulletin, May 9, 1896.) says: "If we fail to destroy pus and septic fluids when opening an appendix abscess, the general peritoneal cavity is likely to become infected. Hydrogen dioxide and physiological saline solution are the sheet anchors of clean appendicitis work, and I would lose a few cases from post-operative septic peritonitis if either one of these resources was omitted. I do not know what surgeons mean when they speak of leaving the free peritoneal cavity unopened, as a rule, in appendicitis abscess work. There are few cases in my practice in which it is not necessary to expose uninfected peritoneum at one or more points. But what is the harm if abscess cavities are properly cleansed with hydrogen dioxide and saline solution? I have so much confidence in our resources to-day, and in the ability of the peritoneum to manage infective processes, that fear of infecting the peritoneum does not enter into my calculations."—*N. Y. Medical Record.*

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GASTRIC ULCER.—Dr. Williamson (Physician and Surgeon, July, 1896.) recommends: 1. Absolute rest in bed. 2. Laxative saline mineral waters and rectal alimentation. Later on liquid nourishment and after three weeks a more generous diet; tonics, preferably the hypophosphites at first, owing to the liver's inactivity usually, and iron preparations subsequently, along with arsenic, which is one of the best. For gastralgia—anodynes, especially morphine. For hemorrhage—absolute rest, ice, morphine, and ergotin hypodermically.—*New York Medical Record.*

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Pay your subscription, and be happy.

# Editorial.

## OUR CENTENNIAL.

As previously stated, we will, from time to time, as occasion serves, keep our readers posted in regard to this great monument of Tennessee's capabilities and possibilities. While months are yet to elapse before the exhibition will be opened, the work has been steadily progressing, and a visitor to our city will be well entertained by a trip to the grounds; which, even in their incompleteness show the magnitude and thoroughness of the enterprise. The following from the *Nashville Banner* of September 5th, is a fair and graphic statement of the status at that date:

"A quick ride from the centre of the city on the electric cars brings one to the Centennial grounds. From the car station the way is through a shaded avenue of maples that conceal and yet suggest the beauty of the scene beyond, just as one is prepared in approaching the tapestries of a splendid hallway for the attractiveness of the inner rooms.

Emerging from the beautiful footway that leads directly to the panorama of the Exposition grounds, the spectacle is one of charming magnificence. The administration building, environed in bowers of shade and plants and flowers, is first to manifest the significance of the spot. Beyond it the Woman's building stands, beautiful and white, with great beds of roses and foliage plants encircling the handsome entrance way that extends a full hundred feet to the front, broad and richly ornamented.

Directly forward the Auditorium lifts its square tower to the sky, whilst its rounded colums show like noble architecture which they commemorate.

Beyond the Auditorium the Minerals and Forestry building, though incomplete, shows a bold front of more than 400 feet. Entire expositions have been held in a building not so large.

Further to the east extends the Allison addition. Work on this addition has not yet begun, but much of the space has been assigned. The balance is reserved for state and county buildings. The first assignment in this addition is the live stock amphitheatre of large dimensions. Pet stock are given a separate place beyond. Beyond that is to be a fine casino, to the right of which is Lake Sevier, with gondolas and native craft. On the eastern side of this lake will be the military encampment and drill grounds, Adjoining this will be the football grounds and other sports.

Returning to the central portion of the grounds, the Parthenon stands, the most impressive and beautiful object of all. Adhering faithfully in every detail to the wonderful original, it is displayed in delicate yellow,

with all the eaves embossed in blue. Line after line of short and easy steps fifty feet wide ascend to the splendid entrance with its double line of massive colums. In front and on every side banks of flowers and foliage greet the eye and render agreeable such a home of art and the refined accomplishments. The eye dwells long and reverently on the structure and the mind thrills with expectation of the treasures it is to contain.

Near the Parthenon the great flag-pole extends 300 feet above, and around its base is the principal band stand.

To the west the Commerce building expands a front of 516 feet—a noble building with a mighty dome that suggests some ancient temple of the gods. To the top of this vast dome an elevator will be run, and thence there will be an aerial railway to the summit of the hill beyond—a distance of 600 feet. Over this road there will be sent at great speed baskets of passengers as safely as though they were on the ground. On the crest of the hill will be the main restaurant and refreshment stands and the wonderful Electrical building, in which all the latest devices will be applied. This building will be entirely novel and unique.

Northward from this hill to the pool below will be the thrilling novelty, shoot-the-chute.

Around the base of the hill for a quarter of a mile is Vanity Fair, laid out, if one may so speak, in platoons four deep, between which wide walk ways and steps will furnish easy approaches. The attractions of Vanity Fair will be too numerous even to suggest here. Every form of amusement and illimitable attractions will be there.

Descending to the grounds proper, the Transportation building confronts you with splendid proportions and a gigantic dome. In this building is to be displayed every form of conveyance from a velocipede to an air ship.

Proceeding around the far circle to the north one encounters the Agricultural building, one of the most impressive buildings on the grounds. It stands facing the entire exposition, and bears upon its top the noblest dome of all the buildings. This dome is one of majesty and sublimity. At its base all that there is of the great exposition unfolds like a treasure house, and looking outward the whole of Nashville extends with inspiring sweep, a worthy adjunct to the hundred years of civilization in Tennessee.

In front of the Agricultural building has been reserved sufficient space on which to grow every product of Tennessee soil.

Toward the east from the Agricultural building is to be Machinery Hall. Ground for this building is now being broken, and its construction is to be commenced at once. The proportions of this building are 375x138 feet. It is to be of noble architecture, and in it will be displayed the best results of modern mechanism.

Further to the east is to be the Negro building—a building of handsome design and imposing appearance, in which the colored people propose of themselves to show to the world that the negro is not under op-

pression in the South but is lending himself properly to all the arts and ends of civilization.

The Nashville, Chattanooga, & St. Louis Railway will erect a handsome station at the northeast end of the grounds, and the street railways approaching from that side will do the same.

The Nashville Electric Railway will extend its lines to the summit of the western hill constituting a part of the grounds so that the passengers, if they so prefer, may be saved the trouble of approaching from below on foot.

All wires at the grounds are to be underground, and pipes to receive them are now laid.

Water pipes extend to every part of the grounds. A pumping station at the northwest corner of Lake Watauga, in the centre of the grounds, is being built, and it is reasonably certain that an ample supply of water, both for regular use and in case of fire, will be obtained from the numerous wells on the grounds. There is a fire plug on every side of every building.

The buildings mentioned form but a nucleus of those yet to be constructed.

Thus vaguely is suggested an outline of what the Tennessee Centennial is to be physically. Its higher uses should be of immediate concern and should command the ardent support of every loyal Tennesseean."

As a means of reaching the grounds when ready for the opening in May next, we will have first the N. C. & St. L. Railroad, with its tracks entering and permeating the grounds. On the south will be the double track electric street railway communicating with every part of the city for a single fare. On the east the Church and Cedar street electric line, and on the north the West Nashville line and the Jefferson street line will afford ready access to the largest possible crowds that may attend at any time. On all the city electric lines a single fare will suffice for conveyance to or from any part of the city.

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TRI-STATE MEDICAL SOCIETY OF ALABAMA, GEORGIA AND TENNESSEE.—The eighth annual meeting will be held in Chattanooga, October 13, 14 and 15, 1896. The following is a partial list of papers:

Convulsions in Children; Report of Cases Treated with Large Doses of Morphine.—Y. L. Abernathy, Hill City, Tenn.

Treatment of Pus in the Pelvis.—W. E. B. Davis, Birmingham, Ala.

Some Remarks on Syphilis.—Willis F. Westmoreland, Atlanta, Ga.

The Therapy of Antipyretics.—P. L. Brouillette, Huntsville, Ala.

A New Splint for Fractures of the Humerus.—G. A. Baxter, Chattanooga, Tenn.

Medicine, Hippocratic and Operatic.—John P. Stewart, Attalla, Ala.

The Turkish Bath; Its Therapeutic Indications.—Louise Eleanor Smith, Chattanooga, Tenn.

Puerperal Eclampsia.—Seale Harris, Union Springs, Ala.

Puerperal Eclampsia.—J. E. George, Rockwood, Tenn.

Humphrey's Operation, Amputation of the Penis.—Cooper Holtsclaw, Chattanooga, Tenn.

Diseases and Treatment of the Accessory Sinuses of the Nose.—B. F. Travis, Chattanooga, Tenn.

A Statistical Report of Some of the More Recent Remedies Used in the Treatment of Tuberculosis and Summary of Recent Preventative Methods of Value.—R. H. Hayes, Union Springs, Ala.

Operations for Abscess of the Liver.—W. C. Townes, Chattanooga, Tenn.

Cystitis; Report of Cases.—D. S. Middleton, Rising Fawn, Ga.

Report of a Case of Bradychardia.—W. C. Bilbro, Murfreesboro, Tenn.

Microscopical and Chemical Examinations as Aids to Diagnosis.—Katherine R. Collins, Atlanta, Ga.

The Woodbridge Treatment of Typhoid Fever.—J. W. Duncan, Atlanta, Ga.

Some Obstetric Complications with Report of Cases.—R. R. Kime, Atlanta, Ga.

Vaginal Hysterectomy for Bi-Lateral Suppurative Processes of the Uterine Adnexa.—W. D. Haggard, Jr., Nashville, Tenn.

Diseases of the Vera Montanum (Caput Gallinaginis).—W. Frank Glenn, Nashville, Tenn.

Treatment of Skin Cancer.—C. R. Atchison, Nashville, Tenn.

Paper on Eye Diseases.—Alec Sterling, Atlanta, Ga.

Paper on Eye Diseases.—J. M. Crawford, Atlanta, Ga.

Paper on Eye Diseases.—G. C. Savage, Nashville, Tenn.

Paper on Eye Diseases.—Geo. S. Brown, Birmingham, Ala.

Doctor Medicinæ, (Presidential address).—J. B. Murfree, Murfreesboro, Tenn.

The usual railroad rates at one and one-third, on the certificate plan; also reduced rates at the hotels. All regular physicians are cordially invited to attend.

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MORNINGSIDE RETREAT.—The Directors of the Morningside Retreat Company, of Nashville, Tenn., have selected Dr. Barton W. Stone to succeed the late Dr. Jno. H. Callender as Superintendent. Dr. Stone's twenty years' experience in the Western Kentucky Asylum at Hopkinsville universally fits him for this work. Insane and other nervous invalids, victims of alcoholic or opium inebriety if sent to this institution will have all the advantages of Hospital care and treatment, combined with the comforts and quietude of a suburban home. Only a limited number of patients being admitted the superintendent is thereby enabled to give his special personal attention to each patient—an impossibility in the larger institutions of this kind, either public or private.

INFIRMARY FOR GYNECOLOGY AND ABDOMINAL SURGERY.—Dr. W. D. Haggard, Sr., Professor of Gynecology in the Medical Department of the University of Tennessee, and his son, Dr. W. D. Haggard, Jr., Associate Professor of Gynecology in the same institution, who has recently returned from an eighteen month's service in the celebrated Woman's Hospital, of New York City, have thoroughly overhauled, refitted and furnished the commodious building, No. 312 North High Street, and established a well-appointed and thoroughly applicable Infirmary for the treatment of Diseases of Women and Abdominal Surgery. A very excellent annex has been added for an operating theatre, in which the most perfect details of asepsis are thoroughly carried carried out. The Infirmary is located in an elevated portion of the city, noted for its freedom from noise, dust, and other inconveniences of so central a locality. The healthfulness of the locality is well established. Both gentlemen will reside in the building, and a corps of well trained and efficient nurses have been secured.

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CORRECTION.—In the biographical sketch of the late Dr. Jno. H. Callender in the last number of this journal, the word "insane," fifth line, page 425, should have been "sane." For this correction, which escaped our proof-reader, we are indebted to Dr. O. Everts, of College Hill, Ohio, who was with Dr. Callender day and night for twenty-eight days during this trial memorable in the criminal annals of this country.

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DIGESTIVE DISORDERS OF CHILDREN.—The value of listerine in those digestive disorders of childhood, which lead to what is commonly called cholera infantum, can scarcely be overrated. A teaspoonful of listerine administered per oris has been known to dissipate the most alarming symptoms, cutting short the attack and apparently saving life. A good way is to begin something like this: Calomel and chlorate of potash each one grain, to be rubbed well together and to be divided into ten powders, one to be given every five minutes until vomiting ceases and the nature of the stools have been changed; then commence and give teaspoonful doses of listerine every four hours until convalescence.—*Med. Progress.*

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"PEROXIDE OF HYDROGEN, HYDROZONE, GLYCOZONE AND EYE BALSAM" is the title of a most excellent little pamphlet of 216 pages, containing reprints of 106 scientific articles which appeared in various medical journals during the last seven years. It contains quite a fund of valuable information in regard to the use of Peroxide of Hydrogen and its combinations. You can obtain a copy free of all charges by writing to the Drevet Manufacturing Company, or to Mr. Chas. Marchand, 28 Prince Street, New York, N. Y.

SANMETTO IN BRIGHT'S DISEASE.—Dr. C. E. Stafford, Trigg, Va., writing, says: "I have used Sanmetto with the very best results. I succeeded in making a case of Bright's disease much more comfortable by the use of Sanmetto, and am satisfied it should be used oftener in this disease. I regard Sanmetto as an efficient and elegant remedy for diseases of the genito-urinary organs."

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WAYNE'S DIURETIC ELIXIR.—This preparation of buchu, acetate potash, etc., is a most happy combination in all irritations of kidneys, bladder, urethra, and prostate gland. It has given most satisfactory results, and is largely used by some of the most practical and successful practitioners, rarely followed by disappointment or regret.

The Tonic Tablets (Wayne) containing phosphorus, damiana, nux vomica, saw palmetto and ext. coca are a reliable and positive aphrodisiac.

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PROOF OF THE PUDDING.—*Mellin's Food for Infants and Invalids* has received the following awards: Diploma at Boston, 1881; silver medal, New Jersey, 1881, gold medal, New Orleans, 1885; bronze medal, New York, 1887; medal and diploma, World's Fair, Chicago, 1893; two gold medals and two special diplomas of honor, San Francisco, 1894; gold medal, Tacoma, 1894; silver medal, Frankfort on Main, 1895; gold medal, Dresden, 1895; gold medal, Atlanta, 1895, and universal approval by all who have ever given it a trial.

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NEW ORLEANS POLYCLINIC.—The tenth regular session of the New Orleans Polyclinic will begin on January 11, 1897, to continue for three terms of six weeks each, ending May 15, 1897. Vast facilities for practical post-graduate teaching at the great Charity Hospital, at the Eye, Ear, Nose and Throat Hospital, and at the special clinics in the Polyclinic's new building. For announcement or further information, address New Orleans Polyclinic, P. O. Box 797, New Orleans, La.

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WE refer our readers to the advertisement of Palpebrine which appears for the first time in this number. This product will be found useful in the following forms of external eye disease:

Simple, acute, catarrhal, venereal, strumous, and chronic conjunctivitis, acute and chronic blenorrhea of the conjunctiva, inflammation of the lachrymal sac, blepharitis, etc.

Palpebrine is indicated in all cases where an accurate antiseptic solution of known quality and quantities are required.

Palpebrine is superior in its action to the remedies now in use. It contains all the constituents of Aqau Conradi, as recommended by the renowned professor of the Vienna University, Ferdinand von Arlt.

INDIGESTION—ERUCTATIONS—DYSPNOEA.—Dr. Alfred E. Meyer says he has been using "Maltine with Wine of Pepsin" at the New York Polyclinic, and also at the West Side German Dyspensary in his Gynecological Clinic with signal advantage with women who are suffering from chronic indigestion, and he also gave it a trial in his private practice. One patient, a lady who had for years had frequent attacks of indigestion, received so much benefit from its use that he decided to report the case.

The attacks usually came on about an hour after eating, the symptoms being great distention of the abdomen and a feeling of soreness and dyspnoea. The attack usually lasted from one to two hours. She had been put on various methods of treatment, not only on different preparations of pepsin and pancreatin, but also on dietetic treatment, without any marked or permanent benefit. After beginning the use of "Maltine with Wine of Pepsin"—a small wine-glass full after each meal, she did not have another attack. The remedy was continued and there appears to have been an entire mitigation of the disagreeable condition under which she had labored for so long, and this too, without any special reference as to change of diet. It was noticed that in taking a dose at the beginning of the treatment there were repeated eructations of gas and the uncomfortable symptoms were relieved in a very short time.

Dr. Meyer says he thinks that the combination of "Maltine with Wine of Pepsin" is a very happy one.

# Reviews and Book Notices.

ANATOMY, DESCRIPTIVE AND SURGICAL. By HENRY GRAY, F. R. S., Lecturer on Anatomy at St. George's Hospital, London. New and thoroughly revised American edition, much enlarged in text, and in engravings both colored and black. In one imperial octavo volume of 1239 pages, with 772 large and elaborate engravings on wood. Price of edition with illustrations in colors, Cloth, $7.00; leather, $8.00. Price of edition with illustrations in black, Cloth, $6.00; leather, $7.00. LEA BROTHERS & Co., Publishers, Philadelphia and New York, 1896.

When Henry Gray, in 1858, issued the first edition of his *Anatomy, Descriptive and Surgical* he builded for himself a durable monument that has but increased in magnitude as the years

have rolled on. No book pertaining to medicine or surgery has been so universally used and become so complete a standard. Blackstone's Commentaries for the Lawyer and even the Holy Scriptures for the Clergy have been no more fundamental works in their respective professions. While other works on anatomy have commanded a due share of meed, not one has ever so reached the acme of perfection as a thoroughly *practical* guide and standard as this.

For the first time in its long history, "*Gray*" has been revised exclusively by American anatomists, and their aim to adapt it thoroughly to the most modern teaching methods and the requirements of American students has been no less strenuous than that it should record the latest advances of anatomical science.

There has, therefore, been effected not only a general revision of the work as a whole, but also entire changes in certain departments in which investigation has been especially active during recent years. The sections which have been rewritten are those on the Brain, the Teeth, and the Abdominal Viscera, exclusive of the Genito-Urinary Tract, while those on Histology and Development—a feature peculiar to *Gray*, and of obvious value—have been remodeled.

The splendid series of illustrations which have always distinguished *Gray* has been enriched in this new edition by no less than one hundred and thirty-five additional engravings. These illustrations have long been known as the most effective and intelligible presentations of anatomical structures, and in the present issue this supremacy is fully maintained.

The practical application of anatomical facts in medicine and surgery has always been a prominent feature of the work, and this distinctive characteristic has again received the especial care of the editors.

In short, this edition is presented to the medical public with the confident expectation that it will be found worthy in every respect to maintain the exalted position which the work has for so many years enjoyed as the most convenient and intelligible exposition of its subject.

A MANUAL OF CLINICAL DIAGNOSIS BY MICROSCOPICAL AND CHEMICAL METHODS. For Students, Hospital Physicians and Practitioners. By CHARLES E. SIMON, M.D., Late Assistant Resident Physician Johns Hopkins Hospital, Baltimore. In one very handsome octavo volume of 504 pages, with 132 engravings and 10 full-page colored plates. Cloth, $3.50. LEA BROTHERS & Co., Philadelphia and New York, 1896.

It has been the author's aim to present to students and physicians those facts in clinical chemistry and microscopy which are of practical importance. Chemical and microscopic methods are described in detail, so that one not having special training in such manipulations will be enabled to obtain satisfactory results.

The application of chemical and microscopical methods in the determination of disease is authoritatively and clearly explained in this volume. Dr. Simon has had the advantage of acquaintance with the best methods developed in European clinics and laboratories, and to this he has added the experience gained in private practice and in one of the largest and most advanced American hospitals. Readers of this work will find complete and thoroughly practical explanations of the diagnostic indications which can be obtained from the blood, secretions of the mouth, the gastric juice and contents, the feces, the nasal secretion, the sputum, the urine, transudates and exudates, cystic contents, meningeal fluid, semen, vaginal discharges, and the mammary secretion, so plainly set forth that the practitioner or student who has not had special training in such manipulations may nevertheless be enabled to obtain satisfactory results. The work is abundantly illustrated with engravings and full-page plates in colors.

JACKSON'S READY-REFERENCE HANDBOOK OF SKIN DISEASES. (The Ready-Reference Handbook of Diseases of the Skin.) By GEORGE THOMAS JACKSON, M.D., Professor of Dermatology, Woman's Medical College of the New York Infirmary and in the University of Vermont; Chief of Clinic and Instructor in Dermatology, College of Physicians and Surgeons, New York. New (2d) edition. In one 12mo. volume of 589 pages, with 69 illustrations and a colored plate. Cloth, $2.75. Philadelphia, LEA BROTHERS & Co. 1896.

This excellent little volume is mainly devoted to symptomatology, diagnosis and treatment; extensive discussions on etiology and pathology being necessarily omitted in a compact ready-reference book.

The author has utilized the opportunity afforded by the demand for another edition of his useful manual to adapt it more perfectly to its purpose and by a revision apparent in every page to place it *au courant* with the latest advances of dermatological knowledge. Its title is aptly chosen. Opening with the classification of skin diseases arranged according to their natural relationship, the body of the volume under an alphabetical arrangement gives full and practical information covering all the various affections of the skin.

The practitioner and specialist will find it a prompt and ready source of knowledge on all the points of terminology, symptoms, varieties, etiology, pathology, diagnosis, treatment and prognosis of dermal affections. Tables of differential diagnosis and standard prescriptions will be found scattered through the text, and the work ends with an appendix of well-tried formulæ. The series of illustrations is rich and instructive.

A MANUAL OF PHARMACOLOGY AND THERAPEUTICS, by WILLIAM MURRELL, M.D., F. R. C. P., Physician to and Lecturer on Pharmacology and Therapeutics at the Westminister Hospital; late Examiner in Materia Medica in the University of Edinburgh, and Examiner in Materia Medica and Pharmacy to the Conjoint Board of the Royal College of Surgeons, England, and the Royal College of Physicians of London. Revised by FREDERICK A. CASTLE, M.D., Member of the Committee for Revision and Publication of the Pharmacopœia of the United States; late Lecturer on Pharmacology at Bellevue Hospital Medical College, etc., etc. 8vo. cloth, pp. 516. WM. WOOD & Co., Publishers. 1896.

Pharmacology has of late attained such importance in the Medical Curriculum that a Student's Text-Book on the subject is urgently needed. This work is an abstract of the lectures delivered at the Westminister Hospital by the author during the last session; is fully up to date, and is well adapted to the requirements of both medical students and practitioners.

The therapeutic side of the question has been treated practically, and the large number of prescriptions found scattered throughout the work will prove of value to all who desire to keep fully up with the progress of modern treatment.

The work has been thoroughly revised by an able member of the Committee of Revision of the United States Pharmacopœia, his additions or alterations being enclosed in brackets.

After a very full introductory section of over one hundred and forty pages, the other sections thoroughly consider Pharmacology of Inorganic Substances, Syrethetical Compounds, Drugs of Vegetable Origin, and Drugs of Animal Origin.

Large clear type, good press work, excellent binding and mechanical execution are all fully up with the high order of excellence attained by the enterprising publishers.

AN AMERICAN TEXT-BOOK OF APPLIED THERAPEUTICS for the use of Practitioners and Students. Edited by J. C. WILSON, M.D., Professor of Practice of Medicine and Clinical Medicine in the Jefferson Medical College, etc., etc., assisted by AUGUSTAS A. ESHNER, M.D., Professor of Clinical Medicine in the Philadelphia Polyclinic, etc., etc. Royal 8vo. pp. 1326. Illustrated. Price, cloth, $7.00; sheep, $8.00; half-morrocco, $8.50; half-Russia, $9.00. W. B. SAUNDERS, Publisher, 925 Walnut Street, Philadelphia. 1896.

This is a new and valuable addition to the series of American Text-Books issued by Mr. Saunders, and like the preceding volumes reflects the latest advances and discoveries in the department of Applied Therapeutics to which it is devoted.

It contains the contributions of more than two-score of eminent American practitioners, each author having been selected with respect of his special qualifications to discuss authoritatively the topic assigned for elaboration. The complete work represents thoroughly the present status of "Applied Therapeutics," particularly from the standpoint of the student of medicine and the medical practitioner.

All the articles are the product of eminent American contributors, with the exception of the one on Malaria by Professor Laveran, and that on Leprosy by Dr. Rake, of London, Medical Superintendent of the Trindad Leper Asylum.

The arrangement of the book has been based, so far as this has been possible, upon modern patho'logic doctrines, beginning with the intoxications and following with the infections, diseases due to internal parasites, diseases of undetermined origin, and, finally, the disorders of the several bodily systems—digestive, respiratory, circulatory, renal, nervous and cutaneous. The disorders of pregnancy are also included.

The satisfactory and practical effort has been accomplished of indicating the proper course of treatment to be pursued at the

bedside, rather than to name a list of drugs that have been used at one or another time. While recognizing the desirability of the metric system, the older system of figures has not been discarded, and both are given where occasion demanded.

In the consideration of diphtheria the antitoxin treatment has been concisely yet practically considered, as is tuberculin under the subject of tuberculosis.

The illustrations, good paper and binding, large clear type, and the eminence and attainments of the various authors make it a most valuable and authoritative work.

A HAND-BOOK OF PATHOLOGICAL ANATOMY AND HISTOLOGY, with an Introductory Section on Post-Mortem Examinations, and the Methods of Preserving and Examining Diseased Tissues, by FRANCIS DELAFIELD, M.D., LL.D., Professor of Practice of Medicine, College of Physicians and Surgeons, Columbia College, New York; and T. MITCHELL PRUDDEN, M.D., Professor of Pathology and Director of the Laboratories of Histology, Pathology, and Bacteriology, College of Physicians and Surgeons, Columbia College, New York. Fifth edition, 8 vo., cloth, pp. 846. Illustrated by 365 wood engravings, printed in black and colors. WM. WOOD & Co., Publishers, New York. 1896.

From the preface to the fifth edition of this excellent work we quote: "The aims followed in the preparation of this, the fifth edition of this work are identical with those which were kept in view in former editions. It has been the intention of the authors to give to students and practitioners of medicine, first, the knowledge necessary for the making of autopsies, the preservation of tissues and their preparation for microscopic study, and to outline the methods of study of pathogenic micro-organisms; second, to describe concisely, with such illustrations as seem necessary, the lesions of the acute infectious diseases, and, so far as they are known, the micro-organisms concerned in their causation, the various phases of degeneration and inflammation, the character of tumors, the special lesions of different parts of the body, of the general diseases, of poisoning, and of violent deaths. All of the sections of the book have been revised, and some of them largely rewritten in the light of recent contributions to science."

It is scarcely more than three years since the previous edition

of this work appeared, but numerous advances in the science of pathology, notably in connection with the examination of the blood, have made it necessary to revise the book, and the occasion has been improved to bring it thoroughly up to date in every department. A great many new and beautiful illustrations, for which this work has always been noted, have also been added.

THE MEDICAL AND SURGICAL USES OF ELECTRICITY, by A. D. ROCKWELL, A.M., M.D., Formerly Professor of Electro-Therapeutics in the New York Post-Graduate Medical School and Hospital; Fellow of the New York Academy of Medicine; Member of the American Academy of Medicine; of the New York Neurological Society, etc., etc. Illustrated with 200 engravings, 8 vo. cloth, new edition, pp. 612. WM. WOOD & Co., Publishers. 1896.

Dr. Rockwell has been most satisfactorily before the profession for some years by reason of his association with Dr. Beard in the bringing out of that standard work, Beard & Rockwell's Electro-Therapeutics, the last (8th) edition of which appeared some four years ago. Dr. Beard, whose death occurred some years ago, had no connection with this well known treatise on the Medical and Surgical Uses of Electricity since the second edition; and, although the work before us may be considered as the ninth edition of Beard & Rockwell, it has been very correctly thought proper to issue the work as it now stands, under the name of the present writer alone.

Dr. Rockwell has rewritten the book entirely, condensed it by omitting many "cases" which were of doubtful value to the student, and revised it up to the latest knowledge on the subject, including the surgical application of X-ray photography. In its present shape it occupies a trifle over 600 pages, octavo, and sells at the very moderate price of $4.50.

We believe it will fill a very general want and meet with much favor. It is unquestionably the best and most practical work of the day on the important subject of electro-therapeutics.

A VEST POCKET DICTIONARY, by ALBERT H. BUCK, M.D., of New York City. Flexible morocco, pp. 529. WM. WOOD & Co., Publishers, New York. 1896.

The aim in preparing this little work has been to offer a dic-

tionary containing the large number of new words which have been introduced into medical terminology during the past few years, and the changes in signification which have taken place in a few of the older terms. It does not pretend to contain every word known to medicine; such a work would be cumbersome and useless, but it does aim to give those words which the reader is apt to meet in treatises or papers on the newer topics in medicine, as well as the standard terms used in all text-books.

It is only $2\frac{1}{2}$x$3\frac{1}{2}$ inches in size, and may be readily carried in the vest pocket.

FUNCTIONAL DISORDERS OF THE NERVOUS SYSTEM IN WOMEN, by T. J. MCGILLICUDDY, A.M., M.D., Consulting Physician to the Italian Hospital, New York; Surgeon-in-charge of the New York Mother's Home Maternity Hospital; Surgeon-in-charge of the Metropolitan Dispensary and Hospital for Women and Children; Fellow of the New York Academy of Medicine; Member of the American Medical Association, etc., etc. 8vo. cloth, pp. 367. Illustrated, forty-five wood engravings and two colored plates. WM. WOOD & Co., Publishers, New York. 1896.

This work treats of a class of affections frequently considered as of too little importance to require medical aid, or perhaps too often overlooked by physicians as of no particular significance. The various Reflex Neuroses, with their almost infinite manifestations, are carefully treated, and ingeniously illustrated by a series of original diagrams.

The chapter on Therapeutics is an extremely practical one, and will doubtless be welcomed by many.

The book is illustrated by a large number of wood engravings, mostly original, and by two full-page colored plates, made from the author's collection of sketches.

Functional disorders frequently occasion as much or more suffering as organic lesions, and in many instances are equally disastrous in their consequences. However, they are, as a rule, more amenable to treatment, and we can but congratulate the author of this work on its most commendable scope and character.

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## Original Communications.

### VAGINAL HYSTERECTOMY FOR BILATERAL SUPPURATIVE PROCESS OF THE UTERINE ADNEXA.*


BY WILLIAM D. HAGGARD, JR., M.D., OF NASHVILLE, TENN.
Associate Professor of Gynecology in the Medical Department of the University of Tennessee.


It is the practice of some of the leaders in abdominal surgery to accompany the removal of irreparable purulent disease of the adnexa by the removal of the uterus also. As that is the postulate upon which this paper is based, the method alone being different, it may not be amiss to briefly recite the arguments which have led to the adoption of this procedure.

It was observed that a larger number of patients having

*Read at the Eighth Annual Meeting of the Tri-State Medical Society of Alabama, Georgia, and Tennessee, held in Chattanooga, Tenn., October 13, 14 and 15, 1896.

removal of the ovaries and tubes for pus were not perfectly cured, the proportion was estimated at one-third by one observer.[1] The persistent and annoying symptom was pain, the very symptom from the patient's standpoint that induced her to have the operation. When that remained or was slightly modified she regretted having ever undergone the operation. This class of cases having hysterectomy primarily or secondarily have been relieved.

It has further been observed that the artificial menopause following removal of the ovaries and tubes is longer and more stormy than in total castration. The former class of cases had ugly purulent and hemorhagic discharges, which prolonged local treatment and currettage, sometimes repeated again and again, failed to benefit permanently.

The malpositions of retained uteri, deprived of their normal supports are painful and intractable. But the pathological reason for total ablation is that the uterus is part and parcel of the disease in pyogenic infection. It participates and transmits the original disease and remains diseased. Where the appendages are hopelessly destroyed, the central disease cannot be eradicated by simple removal of the extensive process. Moreover, it has been demonstrated that currettetment, either before or after is frequently inadequate to conquer long-standing or severe cases of metritis. One of the most experienced and skilled operators for pus has deprecated internal and external operations at the same sitting. It has been claimed that the gonococci are not pus-producing germs, but Williams, of Johns Hopkins, and Roswell Park have demonstrated the pyogenic cocci are invariably present in gonorrhœal pus. In latent gonorrhœa the gonococcus has been found in the muscular structure of the uterus,[2] and it is not a superficial infection as claimed.

Twenty per cent. of pyosalpinx have been declared tubercular[3] and constitutes another plea for the radical operation. The possibility of future malignancy should not be ignored, and reinfection from gonorrhœa is a very practical consideration.

During the progress of operations for densely adherent adnexna, readhesion of the hollow viscera, to large denuded areas on the uterine wall, and the danger of intestinal obstruction should be averted by hysterectomy. It frequently facili-

tates the operation and gives greater security against hemorrhage.

I will anticipate my friends who are opposed to the removal of a "healthy intact organ," by saying that in addition to being in accord with that surgical principle, I am also opposed to removing both tubes and ovaries where the uterus is healthy.

Vaginal drainage in pelvic surgery has largely displaced abdominal drainage, and it is unnecessary to insist upon the rational and ideal drainage facilities afforded by total hysterectomy.

It has been urged that it takes no longer to perform hysterectomy after double salpingo-oöphorectomy than to do a cureting in in septic uteri, or a ventral suspension in adherent uteri.

Finally, it has been demonstrated that it does not increase the mortality in the hands of competent operators, I submit the following tables of operations for pyosalpinx with the removal of the appendages only, taken from recent reports of five metropolitan hospitals:

In 1894-95, Presbyterian Hospital, New York .....29 cases, 5 deaths, 17.2 per cent.
In 1895, New York Hospital.....32 cases, 3 deaths, 6.2 per cent.
In 1894-95, Woman's Hospital, New York.....35 cases, 11 deaths, 14.2 per cent.
Last half of 1890, Roosevelt Hospital, New York ..... 40.0 per cent.
In 1890-92, John Hopkins Hospital, Baltimore 4.....66 cases, 10 deaths, 15.0 per cent.

The general average for the five institutions being 18.5 per cent.

Pryor reports a series of eighty-five abdominal hystorectomies performed by Polk, Krug, Baldy and himself, with three deaths, or a mortality of 3.5 per cent.[5] This series may be regarded as exceptional, but serves to show that the operation is not more grave if properly performed, but on the contrary is and should be much safer.

In this connection I will mention the statistics of vaginal hysterectomy.

Greene collected 724 cases by French operators, with 34 deaths, or 4.6 per cent.[6]

Segond alone has had over 600 cases, with a mortality of 4 per cent.[7]

Jacobs in 403 cases had a mortality of 2.9 per cent.

It is interesting to note the increased application of the vaginal route in this country.

In my first year at the Woman's Hospital, 1894-95, there were 17 vaginal hysterectomies as against 73 abdominal.

In the first six months of the year ending July 1, 1896, immediately following the visit of Jacobs, of Brussells, there were 15 vaginal hysterectomies, and in the succeeding six months 24, making 39, as against 17 the preceding year. There were at the same time 63 abdominal hystorectomies, and the gain in vaginal hystorectomy was principally in the application of vaginal hystorectomy to pus cases formerly treated by double ovariotomy. There were 3 deaths in the 39 cases, or 7.6 per cent.

Krug[8] in a masterly plea for "Extirpation of the Uterus in Disease of the Adnexna" at the meeting of the American Gynecological Society in 1894, in which the principle was championed by Baldy, Hanks, Pryor, Wylie, and others, says: "My objection to the vaginal route in hystorectomy is that where once begun it must be completed, and that this operation does not admit of a clear estimate of the disease of one or the other adnexæ, and possibly some curvative procedure." That objection is not valid at the present time. Exploratory vaginal section should be the first step to every vaginal operation, just as it is in abdominal work. It is an outcome of vaginal hysterectomy. It has lessened the necessity for exploratory laparotomy in the majority of pelvic conditions. It furnishes the best means of approach to the several pelvic suppurations, to adherent adnexa and small intra-pelvic tumors. It gives a minimum of risk and is of universal value in that it can be more frequently employed, especially in private practice, where it is not nearly so formidable as abdominal section. It is a safe and curable method in inflammatory processes;[9] in puerperal infection; and in evacuating drainage of large pus collections where the condition of the patient will not permit of more radical methods.[10] It has also been extended to ectopic gestation.[11] With the addition and aid of Trendelenburg's position, with the patient in the dorso-sacral position it permits of inspection of the pelvic contents through the vagina, and has rendered conservative surgery of curably diseased appendages easily possible, and a safe mechanical treatment of adherent retro-displacements;[12] and finally it is the initial step of every vaginal hysterectomy. A careful, satisfactory exploration of the pelvis can be made. With two

fingers in the cul-de-sac, and the other hand above, the relations size, and nature of morbid masses can be determined with ease and accuracy. This, I think, is the supreme triumph of the vaginal operation, affording at once the means of a decisive exploration, the first step to a radical or the essential one to a conservative procedure.

In suppurative disease of the uterus and appendages requiring removal, the vaginal method is preferred to the abdominal for the following reasons:

1. The preliminary step, vaginal section, allows thorough exploration and the application of any appropriate conservative treatment with a minimum of risk.

2. The vagina is the natural approach and logical avenue for drainage of the pelvis and its contents.

3. It is immune from the unpleasant sequelæ of laparotomy, possibility of ventral hernia, of stitch abscess, of infected ligature and sinuses, and the abdominal supporter.

4. There is less immediate shock, the convalesence is smoother and shorter.

5. There is no exposure or handling of intestine.

6. The mortality is lower.

It only invades the diseased area and leaves undisturbed the protecting roof of adhesions, and is founded upon the same surgical principle that makes lumbar nephrectomy the operation of choice in pus kidney.

It can hardly be claimed by the most expert abdominal surgeon or the most ardent advocate of the abdominal route that there are not cases of extensive adhesions to purulent collections, in which it is impossible to effect enucleation without great danger to the intestines. In this connection it is interesting to note the conclusion of Sègond after more than 600 vaginal hysterectomies:

"I have arrived at the conviction that whatever can be enucleated through the abdominal wall can also be removed through the vagina, and whatever it is impossible to enucleate through the vagina cannot be removed by the abdominal method, except at the price of procedures incomparably more grave and more laborious." [18]

The possibility of leaving the walls of densely adherent nonremovable sacs with impunity is the commendable feature.

Ségond further says: "From the point of view of prognosis as to the future condition of the severest cases of suppurative pelvic peritonitis, incomplete ablation by the vaginal method, gives extremely satisfactory results in the majority of cases."

The operation of vaginal hysterectomy, stigmatized "blind" surgery by those unacquainted with the possibilities of its correct execution, has for its motto: "Do what you see, and see what you do." It is not an operation of dash or brilliance, but of pains-taking, patience and perseverance. It requires for its proper accomplishment the several instruments illustrated herein. The successive steps may be summarized in the following operative formula, which may be varied to suit the necessities of the case:

1. Preliminary curettage.
2. Posterior vaginal section and exploration of pelvis.
3. Completion of circular incision around cervix of pelvis, prolonged transversely in the lateral fornices.
4. Freeing cervix anteriorly from bladder and ureters.
5. Application of clamps to base of broad ligaments, containing the uterine arteries.
6. Amputation of cervix.
7. Median section of uterus.
8. Enucleation of each appendage separately.
9. Application of clamps to upper portion of broad ligaments containing ovarian arteries.
10. Excision of each lateral half of uterus with diseased masses.

*Details.*—The preparation of the patient is the same as for any other vaginal operation—purgation for two successive days; enemata six hours before operation; douches of bichloride 1-3000 for several days preceding; shaving of abdomen and external genitals, and application of an antiseptic dressing to the abdomen and pudenda.

The patient is placed in the dorsal decubitus, under ether; some mechanical leg-holder adjusted and the entire lower abdomen, pudenda and buttocks scrubbed with brush and liquid soap. The vagina is also scrubbed with soap, and a cotton mop or a dressing forceps. Copious bichloride irrigation is made over the parts, and the abdomen and field of operation surrounded with sterilized towels.

With the posterior retractor of Pèan (Fig. 1.) the cervix is exposed. It is then dilated, and the uterus curetted and wiped out, with gauze wrapped around a small compression-forceps. The curetting instruments are then discarded. The posterior fornix is incised at the cervico-vaginal junction, stripped back until the

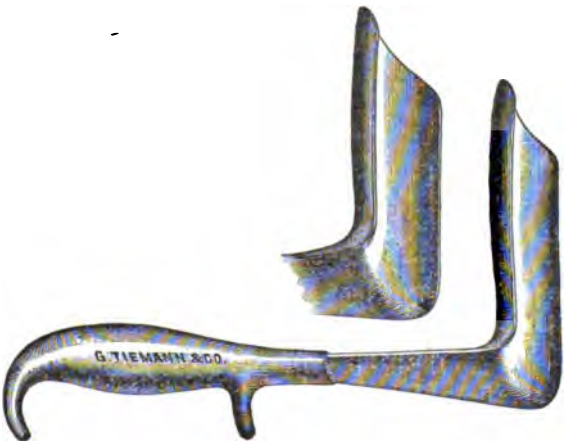


FIG. I.—Pean's Retractors.

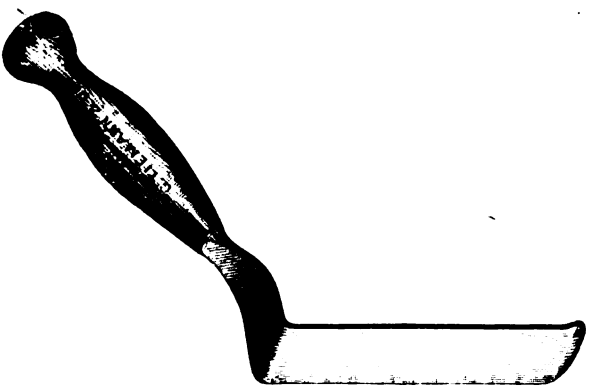

FIG. II.—Anterior Retractor.

peritoneum at the bottom of Douglas' space is reached, which may be entered at once by the finger, or with a snip of the scissors. Then a careful examination of the adnexa is made, and on that examination alone should the final decision for hysterectomy be made.

It would seem unnecessary to repeat, that purulent disease of both adnexa forms the only indication for hysterectomy discussed in this paper. The absolute indication having been satisfactorily settled by exploration, the surgeon may proceed. The anterior incision is made at the cervico-vaginal junction, and the bladder and ureters pushed up with some blunt instrument as a pocket spatula, or with the finger, manual manipulation here as elsewhere in surgery being preferable. This moment of the operation constitutes the first and principal danger of wounding the bladder, a danger that with the requisite care is not great, and occurring is not very serious. The first hysterectomy I ever witnessed suffered this accident, but was repaired and gave no further trouble. In my own first case I wounded the bladder at a later stage in stripping the cervix with the finger, but in that instance the operator and not the method was culpable. The circular

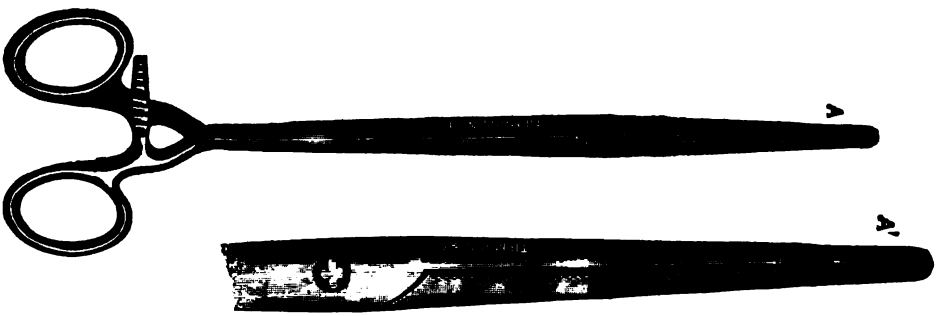

FIG. III.—Compression Forceps.

incision around the cervix with a scalpel should be prolonged transversely in each lateral fornix. This is the Sègond incision, and allows the ureters to be pushed upward and outward, and out of harm's way. A short-jawed compression forcep, (Fig. 3.) is now applied to the base of each of the broad ligaments, close to the uterus. The moment the clamps are adjusted and closed, all bleeding ceases. No effort need be made to control the slight hemorrhage up to this stage, and the traction prevents hemorrhage during the remainder of the operation. The cervix having been stripped up a considerable distance, is now amputated to the tip of the forceps. It may be slit transversely to facilitate its detachment. A firm hold is then taken in the uterine body with traction forceps (Fig. 4.), one on each side,

and the anterior face of the uterus slit up the middle with a traction forceps on each side of the incision, one blade of which is in the uterine cavity, and the other on the anterior surface of the uterus. The organ can be drawn down as the section progresses. The utero-vesical peritoneum is opened when reached, and separated laterally with the index fingers; only one retractor has been used so far.

There is little use for an anterior retractor (Fig. 2.), and its careless use is greatly condemned by Ségond, who believes many vesical injuries are inflicted by it. When the section is completed the stump of the uterine body, with an attached traction forceps, will be at the vulva; the fundus, with a traction forceps on each side of the slit in the anterior wall, will be at the anterior commissure. The section may now be continued down the posterior wall by appropriate traction, the scissors being protected by the fingers of the left hand. When the uterus is halved,

FIG. IV.—TRACTION FORCEPS.

each segment can be drawn down to a surprising degree, and the adhesions binding the adnexa can generally be separated by the finger under guidance of the eye. This is a matter of surprise to one seeing the operation for the first time. The uterine segment greatly facilitates enucleation, as it is a non-friable point for traction. It is well known that it is not the traction that ruptures a pus-tube in the abdomen as much as the pressure necessary to make traction. When the diseased appendages are liberated, another clamp, protected by the finger behind and the thumb in front, is introduced from above downward, clamping the upper portion of the broad ligament containing the ovarian artery. The structures are then removed by cutting within the forceps and the same manœuvers applied to the opposite side. The retractors are again introduced, a careful inspection of the entire field made, and any bleeding points clamped. If pus pockets

have been opened they can be irrigated with hydrogen peroxide (Cleveland), followed by sterilized water, or the latter alone. Strips of iodoform gauze are then carefully introduced above the tips of the forceps, and folds of the same are placed between the clamps and vagina all around.

A retention catheter, (Fig. 5.) clasped at its distal end, with a serre-fine to prevent leakage, is introduced on the point of a sound, and the clamps are inspected and tightened before being wrapped in sterile cotton and gauze. This is the typical operation with only four clamps. It may be modified according to the wish of the operator or the demands of the occasion.

*After-treatment.*—The general after-care is similar to abdom-

FIG. V.—SELF-RETAINING CATHETER.

inal cases, except that liquids and nourishment may be given much more generously, and morphia, which is absolutely necessary, does not seem to have the unpleasant effects observed in abdominal surgery. The bladder is evacuated every four hours. The clamps and catheter are removed at the end of forty-eight hours and a saline administered. The gauze need not be disturbed for five days, when, after irrigation, it may be removed. The vaginal opening will be found to be roofed over with granulation tissue. The cicatrization of this tissue and the clean and early removal of the eschars may be facilitated by vaginal irrigation daily, followed by an iodoform gauze dressing. While the patient feels well enough to get up after a week, and is allowed to do so by some operators, it seems wiser to keep them in bed for at least two and, better, three weeks.

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The illustrations in this article were kindly furnished by the well-known Surgical Instrument Manufacturers, Messrs. G. Tiemann & Co., of New York City.

## THE PUERPERIUM.*

BY J. R. BUIST, M.D., OF NASHVILLE, TENN.
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"The Puerperium" is a phrase that seems to be restricted by recent obstetric writers, to the period of convalescence of the puerperal patient, which begins at the end of the third stage of labor, on through the succeeding four or five weeks.

The subject proposed for to-night relates to the behavior of the uterus itself during the early part of this period; and our remarks will include a reference both to the acute diseases of the lying-in woman, and the remoter pelvic maladies, so common in the female. We will attempt to point out the causal relations that subsist between these troubles and the incomplete and feebly contracted womb soon after labor. We think it is well to emphasize more distinctly than the text-books usually do, the dangers menacing the woman, in consequence of a failure to secure complete closure of the uterine cavity early in the puerperium; and the necessity for the accoucheur to exercise constant oversight and dilligence to see that the proper normal conditions take place.

Our own experience in obstetrics teaches us that the duties of the practitioner by no means end with the delivery of the afterbirth; but if he would have his patient escape the perils of infection and make such progress in the first week of her convalescence as to ensure an absolute recovery, he must properly understand the nature of the succession of changes that occur in the uterus during the first few days after delivery.

*A paper read at Nashville Academy of Medicine.

Aside from the well-recognized dangers of hemorrhage, which result from lack of primary contractions of the organ, we must, as practical obstetricians, remember that a loose, flabby and uncontracted uterus, presents the antecedent conditions; establishes the predisposing causes, which render possible the invasion of bacteria—to result in either local or general infection, acute or chronic sepsis. Besides, the management of the case at this time, is to decide the fate of the woman as to her subsequent health, dependent on the progress of that involution so necessary to protect her from chronic ailments, such as prolapsus, retroflexions, etc., etc.

Suppose that after a normal labor, the placenta and secundines having come away in good time and a hard spheroidal body is felt over the hypogastrium, you leave the patient feeling very comfortable; perhaps you do not see her again for twelve or fifteen hours. You then examine the abdomen, and after much search you discover the fundus at or above the umbilicus; the womb so soft and unresisting that it is hardly distinguishable; the flow has been free, and no after pains have disturbed her; such is not an uncommon state of affairs in every day practice. What now is the condition of the cavity? It is more or less filled with partially clotted blood; with serum and debris of the inner lining of the walls; the orifices are patulous; the raw surface from which the placenta was detached covers a much larger area than if the organ were closely contracted. In such a condition you readily see are combined all the elements that favor ingress, growth and dissemination of pathogenic bacteria. Of course this apprehended danger presupposes the presence of these bacteria; but Tait's often quoted saying, "that if we would let the germs alone, only see that they have no culture ground to feed and multiply on," contains a good deal of wisdom. Nothing certainly could afford a better culture medium than an uncontracted uterus on the second or third day. The open os and cervix afford admission to the outer air, the placental wound is extensive, the thrombi extend deep into the sinuses and veins, and it is not at all strange that we so often have sepsis in these cases. The knowledge that he has allowed a typical culture medium to be provided in the vitals of his patient, should fill the accoucheur with alarm and distress.

If infection reaches the interior of the uterus in this dilated state, the broken down and necrotic tissue adhering to the inner wall soon becomes impregnated, and from thence the sinuses, full of dead thrombi, are invaded, and the very worst forms of puerperal fever develop, to which the patient is almost sure to succumb.

Instead of such an acute course, the case may present a milder type of infection: An offensive discharge is noticed, some tenderness of the hypogastrium, some fever gradually rising, sweating and general weakening and emaciation go on until five or six weeks have passed, during which you have allowed your hopes to influence your judgment, and regard the case as one of a low form of continued fever, and you have fervently trusted that the family entertained the same view.

The patient gets up finally, but she is never well afterwards. She has had local infection of the endometrium, and we all know how prone endometrial inflammation is to invade the tubes, and thence sooner or later comes ovaritis, pelvic peritonitis, etc., and the patient is finally turned over to the operative gynecologist. All this is directly traceable to an open and uncontracted womb, in the majority of cases.

But not only such acute dangerous results follow from the condition of the womb we are considering, but that normal atrophy or involution which should begin by the end of the second or third day and go on continuously for six or eight weeks, is not only delayed in commencing, but is retarded all the remainder of that period. A large womb means a large amount of blood in its tissue, and therefore the normal atrophy will not proceed.

It is thus that you will find a patient who has a "slow getting-up"—has a too free and too prolonged lochial discharge, is uncomfortable about the pelvis several weeks after her confinement; when she stands and attempts locomotion, a heaviness and pressure are complained of; the bladder disturbs her by its frequency of action, and the bowels become constipated. If you institute a digital examination in such a subject some five or six weeks after her labor, you will find a large, soft and depressed womb; or else, especially if she has been allowed to lie on her back for a long time, and has neglected to empty the bladder at proper intervals, you will find at least the first degree of retro-

flexion. This condition of retroflexion originates in most instances from weakness in the muscular walls of the womb, abnormal weight of the organ and the recumbent position too long maintained.

To properly appreciate a faulty and defective process in a post-partum uterus, we must know how the organ should behave under normal conditions. The uterus after labor has to return to a state at least approximating the virgin uterus; and for the best interest of the patient, the progress ad interim should be rapid and uninterrupted, completed in from eight to ten weeks. "The rapidity with which the uterus after delivery tends to resume the volume and dimensions which it possessed before impregnation, is, to say the least, quite as surprising as the rapidity with which it underwent its enormous hypertrophy during gestation." Such should be, but is too often prevented.

The forces that bring about this reduction are:

1. The contraction of the uterine muscular fibre which, like all other muscular action, is intermittent and clonic.

2. The power of retraction, inherent in all animal tissue, by which when tension is removed, the tissue shortens by a re-adjustment of fibre cells, a slow and quiet action, but none the less constant and effective; and,

3. The atrophy of the tissues in the uterine walls.

Retzius and Kölliker, in old times, thought a fatty degeneration of the tissues occurred and then resorption. It is probable, however, the whole process of involution is simply the result of lessened blood supply; the diminution in volume of the womb which by necessity shuts off the nutrient blood supply. Under favorable conditions with the delivery of the placenta and the expulsion of the blood clots and membranes, the womb assumes that familiar and characteristic globular form, hard, resisting and contracted, the fundus only two or three inches above the symphysis. This firm and close state of the organ does not continue; relaxation of the muscular fibre must occur, and usually in from one to four hours, the size of the womb is enlarged and reaches to the umbilicus. This is not an abnormal condition, but is a very critical period in the puerperium. If the muscle has tone enough and retraction is not interfered with recession sets in again in a few hours; any blood that has clotted in the cavity is

expelled, and the womb cleans itself a second time and a gradual and uniform diminution goes on to complete recovery. On the other hand, if from any cause there is a failure to re-contract, the cavity remains for several days large and expanded; blood, serum and shreds of tissue accumulate, are retained, and the work of decomposition and infection may begin. Or, if an effective aseptic procedure has kept the parts free from germs, the patient will, nevertheless, have a crippled organ to annoy her for years.

Many years ago, the eminent obstetrician, Dr. Wieland, made accurate observations as to the progressive diminution in size of the post-partum womb and recorded his results as follows:

"Where normal conditions were obtained, he found the average measurements were, immediately after the end of labor, in vertical diameter four and one-half to five inches; transverse, three and one-half to four inches. In a half hour, and for the first few succeeding hours, the size increased; thereafter the decrease was gradual and uniform. On the second day, diameter diminished from three eighths to five eighths of an inch. On the third day little change was noticed, unless the lochial discharge was very abundant and the after pains severe. Up to the fourth day the change was slow, due probably to the commencement of lacteal secretion. At this time the distance from symphysis to fundus varied from two and three-eighths to two and seven-eighths inches. By the sixth day, the uterus is hard, the anterior surface less convex, and the fundus an inch and a half to two inches above the symphysis. By the tenth, and sometimes not until the eleventh day, does the fundus disappear behind the symphysis. It was only at the end of three months, did he find a complete restoration to its primitive size, weight and shape."

From the *American Text-Book* I take the following.

The rate of the retrograde changes of the uterus are given by Heschel, in grammes, are:

| | |
|---|---|
| At close of labor | 770 to 805. |
| At end of first week | 665 to 735. |
| At end of second week | 350 to 385. |
| At end of two months | 45 to 75. |

Kaltenbach gives the weight at the end of the third stage at about two pounds.

"The uterus measures," says the author of "The Physiology

of the Puerperium," *American Text Book*, without citing any special authority, at the close of labor, from seven and three-fifths to eight and two-fifths inches in length, and four and three-eighths inches in width, at Fallopian tubes.

The following measurements are from Hensen:

| | |
|---|---|
| Tenth day | 3½ to 5½ inches. |
| Fifteenth day | 3½ to 4½ " |
| Tenth week | 2½ to 2½ " |

If we seek for the cause of this abnormal want of contractility, we will not have far to go.

Muscular weakness in a general way implies inability to strong and long-continued contraction, both in the voluntary and the involuntary muscular fibre. In some persons this is a constitutional defect, so that in certain women in child bed, there is a marked deficiency in the power of contraction, and in others, after a short period, the muscle tires, the pains cease.

Again, in the long, active labors, by the time the uterine contents are expelled, we find the tonicity of the muscle exhausted and hemorrhage results; or if this is escaped, the normal relaxation is continued into a permanent loss of contractile power in the organ.

Another producing cause is often seen in chloroform narcosis, especially if long continued and profound.

It has been said that the presence of clotted blood in the cavity often prevents post-partum contractions. To me it seems that this is incorrect. The clots, like other foreign bodies, should act as a stimulant and incite contraction, and would do so if the muscular irritability was not lost. Their presence is at all times a result, and never a cause of uterine inertia.

Another condition sometimes operative is extensive laceration at the os and cervix, for I think it is a physiological law that where the circular and sphinteric fibres are destroyed, the fundal becomes defective in their contractile power.

One other circumstance that sometimes disturbs the natural evolution of the puerperium, is undue emotional excitement in the patient. The announcement of bad news, such as the death of the baby, the annoyance and worry of certain persons in the room, tend to arrest the contractile and retractile force of the uterus.

If normal contraction and speedy involution are the safeguards against infection, and remote and chronic pelvic maladies, the question is very pertinent, can the practitioner do anything to obviate such consequences? I believe much can be done to obtain the proper and complete closure of the womb, and that the attendant should always be watchful and use such means as will best secure this all important result.

His first duty is to see that the primary closure is accomplished during the retention of the placenta and immediately after; never give the uterus a chance to fill up. As soon as the fœtus is born, or as soon as the head comes into the world, give a drachm of fluid extract of ergot. Then, during this period have one hand constantly over the fundus, should relaxation occur, gently knead and rub the organ, a la mode Credé. After thirty or forty minutes from the expulsion of the after birth, if all goes well and the womb is hard and firm, put on a well fitting abdominal bandage with a soft but firm pad over the hypogastrium. I prefer the form of bandage used in laparotomy cases to any other, using the lowest strip to pass around under the thigh. The patient should be seen at the end of six hours, and if the normal relaxation tends to become extreme, a teaspoonful of ergot should be given and repeated every two to four hours for twenty-four hours. Gentle massage of the uterus should be practiced by the doctor or the nurse for as long as the atony lasts, even if it requires an hour or two.

If, at the end of thirty-six or forty hours the fundus is up to the umbilicus, the organ soft and unresisting, and the massage and ergot have not succeeded in closing the cavity, I recommend a hot irrigation of the uterine cavity, a half gallon at least, the patient being on her back and a Kelly's pad beneath her.

At the end of sixty hours, if matters have not decidedly improved, place the patient across the bed on a Kelly's pad, douche well with sterilized water and creolin solution, gently curette, trying to ascertain if any portions of placenta have been left, turn out the clots, douche again and insert a strip of iodoform gauze.

A very important point with me is to require the patient to sit on a commode at the end of eighteen or twenty-four hours, when she is to have an action of bladder and bowels, provided

always the labor has been normal and no complications exist contra-indicating the sitting posture. The reason for this is, that the recumbent position favors the retention of blood in the uterine and vaginal cavities, while the action of bladder and rectum in the sitting posture seems to stimulate action in the womb and secures good drainage.

It is hardly worth while to insist on the importance of feeding the puerperal woman liberally from the start, as the age of starvation, the tea and toast period, is now almost forgotten. In cases of weak muscular tone, anæmia and debility, of course, a nourishing diet and a tonic regimen is called for in order that the retrogressive changes in the walls of the womb may progress as speedily as possible.

Lastly, by no means keep your patient, if healthy, and no complications have occurred, confined to bed more than nine or ten days. The debility, want of appetite, and bad drainage of the parturient canal that the recumbent position fosters and induces, make it important that the woman be up on the ninth day, and gradually from this time increase her excercise.

There are many reasons why a mother should nurse her child from her own breast, and among these, the manifold effects upon the progressive involution of the womb, is not the least.

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## GANGRENE, WITH SPECIAL REFERENCE TO THE SAPROPHYTES.*

BY LARKIN SMITH, M.D., NASHVILLE, TENN.
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The first suggestion conveyed by this caption is, what causative relationship do the saphrophytic bacteria bear to the process of gangrene, and in this light we will consider the subject, first taking up the usual classes of causes of the condition.

*Read at the Nashville Academy of Medicine.

These may be mentioned as chemical, an example being destruction of the tissue elements by powerful escharotics.

Mechanical causes produce death of tissues as illustrated in crushing railway injuries.

Physical causes come next, and here we recall the well-known effect on vital structures of extremes of temperature, either plus or minus, also the action of electric currents.

Clinically speaking, the most frequent cause is the cutting off of the nutrition of a part. This may be produced in a variety of ways; obstruction of the nutrient artery by embolism, thrombosis, or otherwise, and obstruction to the return flow through the veins are prominent in this class. Profound vaso-motor disturbances are sometimes responsible for this condition, and some contend that injury to so-called "trophic nerves" alone will produce gangrene. Another cause is an intense inflammation, resulting in a complete stasis over a considerable area, which is followed by death of that part.

Finally, gangrene may be produced by the direct poisonous action of bacteria of a virulent nature, and among these the bacillus of malignant œdema is found. However, we must remember that these forms are parasites, not saprophytes.

It is a well known fact that water in a certain quantity is essential to growth and reproduction of bacteria, so in those cases where the tissues dry out as gangrene proceeds; where, in other words, we have a dry gangrene, there is no bacterial infection owing to lack of water, and the saprophytes do not enter the question and the tissues simply mummify.

On the other hand, where the tissues are full of fluid at the time of their death, then saprophytic bacterial infection occurs, either from the air or through the blood, or both, resulting in putrefaction. We then have a moist gangrene. At the beginning of gangrene we find several kinds of micro-cocci and large bacilli, these are succeeded by the smaller, actively motile forms, formerly described under the head of bacterium.

Probably the most important forms are the several varieties of proteus.

The first chemical change noted is that these bacteria change the albumins into peptones, a power possessed by many different micro-organisms; after this the changes become much more complex.

The saprophytes are either aerobic, or anaerobic, or as most are, facultative anaerobics.

The aerobic forms multiply on the surface of the part, splitting the peptones up into the simpler chemical forms of carbon dioxide and ammonia. These gases partially forming the atmosphere around the part, favor the growth of the anaerobes which are located in the depths of the tissue mass, and there producing the gases which distend the tissues under these circumstances, these gases being principally hydrogen, hydrogen sulphide, ammonium sulphide and methane. Besides these gases much more complex chemical forms are produced from the putrefying albuminous tissues by these saprophytes; namely, ptomaines, toxalbumins, fatty and other acids and salts. Among the most important of these ptomaines and the simplest are methylamin, dimethylamin, trimethylamin, ethylamin, diethylamin, triethylamin, propylamin, butylamin, and others of a much more complicated structure.

Now to the main point. Many of these bacteria, during their life processes form substances which have the power of devitalizing the adjacent healthy tissue, and in this way may the saprophytes produce gangrene in tissues still alive when these organisms first entered the body.

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## CREDE'S ANTISEPTIC (CITRATE OF SILVER—VON HEYDEN) IN GONORRHŒA.

BY DR. O. WERLER, BERLIN,

*Specialist in Diseases of the Skin.*

Translated from the *Berliner Klinische Woschenschrift*, Sept. 14, 1896.

The introduction of the Citrate of Silver into medical practice must be placed to the credit of Credè; and soon after the publication of his paper on "Silver and the Silver Salts as Surgical and Bacteriological Antiseptics," I began to experiment with them in gonorrhœa, The results of these experiments will be detailed at length elsewhere. The drug, which is pre-

pared by the chemical factory of Von Heyden at Radebeul, has been used for the last six weeks, both in my private practice and in the poliklinik, in at least fifty cases of gonorrhœa, acute and chronic; in three cases of gonorrhœal urethritis in women, in cases of Bartholinitis gonorrhœica and in several cases of chronic cystitis. The results obtained have been very favorable. The cases in the poliklinik were treated with the coöperation of Mr. Isaac, medical student, who was assistant in my poliklinik at the time, and he can bear witness to their accuracy both from a diagnostic and a therapeutic point of view.

As regards the technique of application, the drug was used both as an injection done by the patients themselves, and in the form of irrigations made after the Diday method. I also used it in a modified and more practical form of the Janet method, consisting of a lavage of the entire urethral canal with about 300 ccm. (10 ounces) of a lukewarm Citrate of Silver solution injected through a large nozzle. In acute gonorrhœas the patients were ordered a mild solution (1 to 8.000) immediately on entering the poliklinik, according to the following formula:

℞ Solut. Argent. Citr. Von Heyden 0.025: 200 gms. (4-10 to 7 ozs.)
D. in vitro flavo.
S. To be injected into the urethra four times daily;

and this was increased in strength in the course of time until the amount of Citrate of Silver solution reached 0.03 (½ grain) to 0.05 (¾ grain) per 200 gms. (7 ounces). It is very important that the injections be begun as soon as possible after infection has occurred, so as not to give the gonococci time and opportunity to spread over the surface of the mucous membrane and penetrate into its depths.

In all the cases that I treated the Citrate of Silver proved to have energetic disinfectant and bactericide properties, even in very weak solutions; and I can, therefore, recommend it most heartily for the local treatment of the very sensitive urethral mucosa in gonorrhœa.

From the standpoint of urology I quite confirm the opinion of its discoverer, that the Citrate of Silver will be an important agent in surgery and bacteriology. Credè deserves our thanks for increasing the number of the silver salts, which seem destined to play so important a part in the future treatment of gon-

orrhœa, by a powerfully gonococcicidal yet milder form of the drug.

I can summarize the results of my experiments, so far as this preliminary communication goes, as follows:

1. Citrate of Silver has an intense destructive action on the gonococci.

2. It is well borne by the urethral mucous membrane, and causes no noticeable irritation or increase of the inflammatory symptoms.

3. It acts both energetically and deeply without causing lesions of the mucosa.

Von Heyden's Citrate of Silver fulfills all the demands that modern scientific medicine makes of a practical antigonorrhœal remedy, and it deserves a high rank in the list of silver salts that may be used in the treatment of that disease.

# Selections.

THE MODERN TREATMENT OF DIPHTHERIA IN PRIVATE PRACTICE.—On the evening of September 14th, a little girl called at my office with a request that I should visit her sick brother. The public schools opened their doors on that day, and Johnny McD., although complaining of feeling sick, was sent to mingle with the hundreds of other school children.

An inspection of the case showed all the clinical symptoms of diphtheria, with a muco-purulent discharge from the nostrils so fetid that the odor filled the room. The examination completed, the mother anxiously inquired: "What is it?" "It is a case of diphtheria," I said; and her face blanched, her voice trembled, as she said quietly: "I know what that means—I have buried two children with that."

On the 19th the father called at the office to say that Johnny could not be kept in bed, and they thought he was well.

In a skeleton way this illustrates the results of treatment with anti-diphtheritic serum, and stands in bold contrast with

the drug treatment with the bottles of medicine, the cruel swab, the sleepless nights, the futile attempt to force food and medicine, the onset of secondary infection and death or a tardy convalescence.

The uniform success which I have observed, and had in my own practice, has convinced me that the treatment of diphtheria with antitoxin is a great advance in therapeutics, and it is my impression that critics who have condemned this treatment have in most instances either observed only hospital patients, or have not had a fresh and reliable serum, or have not used it early enough.

From the standpoint of a general practitioner I confidently expect to cure any case of diphtheria in private practice seen within forty-eight hours of the onset of the disease.

Take, for instance, a typical case: A previously healthy child, six years of age; the family physician is called in and finds the following conditions: general depression, face pale, pulse accelerated, temperature about 101° F. Inspection of throat shows general diffuse redness, with the characteristic deposit on one or both tonsils. This peculiar deposit once seen is not readily forgotten; the high fever, flushed face, and rapid pulse usually seen in pseudo-membranous tonsilitis are absent, the margin of the inflammatory process is usually sharply defined in diphtheria and not in tonsilitis. In follicular tonsilitis the leading symptoms are: intense conge tion of the tonsils, with small discrete white patches, pulse and temperature high.

If, however, the symptoms are not well defined and the differential diagnosis can not be clearly made, we should give the patient the benefit of the doubt and a dose of anti-diphtheritic serum administered at once. Then a culture should be made to verify the diagnosis. If I believe the case to be diptheria, or have a reasonable doubt as to the diagnosis, I use the antoxin while waiting for the report from the bacterologist. If the case turns out to be tonsilitis no harm has been done, as I consider a fresh, reliable serum, properly administered, devoid of danger.

Given, then, a case where the diagnosis of diphtheria is clear, I give as quickly as possible either 1000 units or 1500 units of the serum. The attendant is instructed to keep the throat clean with a bichloride solution of 1 to 5000, or a solu-

tion of permanganate of potash may be used 1 to 4000, if the attendant is not a trained nurse. With a young child, difficult to manage, it is best to inject the solution into the nostrils; in older children, a spray can be used in both nostrils and throat more advantageously.

At the end of twenty-four hours I expect to find the membrane beginning to shrivel and curl up at the edges. In any event, however, I administer a second injection at this stage of the disease, and in a majority of instances this is sufficient. I advise very strongly that the second injection be given in all cases where the diagnosis of diphtheria is clear. I do not expect a cure from one injection and rarely omit the second. If the symptoms do not indicate the beginning of convalescence at the end of forty-eight hours, I give a third injection. In fact, I would use a fourth injection if it seemed advisable at the end of another twenty-four hours, but I think this will rarely be found necessary.

I have not used anti-streptococcic serum, but I am convinced that in cases in which the treatment has been delayed, or in cases showing the streptococcic infection, proven by bacteriological investigation or from the peculiar red zone of inflammation which begins to spread from the margin of the diphtheritic process, the anti-streptococcic serum should promptly be used. Not only would I do this, but in cases of severe acute disease in the throat, which present all the symptoms of diphtheria, but where the bacteriological report does not confirm the diagnosis, I would resort to the anti-streptococcic serum. In fact, if I should have a case of diphtheria in which the membrane does not begin to peel up by the end of the twenty-four hours following say the second injection of antitoxin, I will use the anti-streptococcic serum.

The importance of a fresh, reliable, highly concentrated serum must not be lost sight of, and as I have full confidence in our American products, I do not use imported serums. I have used several serums, but have been best satisfied with the effects of that sent out from the biological department of Parke, Davis & Co. I heartily approve of the way this firm now puts up the serum, in bulbs instead of in bottles. It is not only highly concentrated, but, being hermetically sealed, should keep indefinitely. It is put up in bulbs of so many units, 250, 500, 1000,

1500, and each bulb being a dose, there is no temptation to use a serum that has been exposed to the atmosphere. I append a table giving a report in detail of the last seven cases treated in private families.

TABULAR REPORT OF CASES.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Age of patient | 8 yrs. | 3 yrs. | 3 yrs. | 11 yrs. | 3 yrs. | 3 yrs. | 8 yrs. |
| Other cases in family | | | | | | Yes. | |
| Bacteriological cultures | Yes. | Yes. | | Yes. | Yes. | | Yes. |
| After first appearance of the disease antitoxin was given | 1st day. | 1st day. | 3d day. | 2d day. | 2d day. | 2d day. | 3d day. |
| Doses of antitoxin given | 3 | 2 | 2 | 3 | 3 | 2 | 3 |
| Units in each injection | 1500<br>1000<br>1000 | 1500 | 1500 | 1000 | 1500 | 1500 | 1500 |
| Total number units in each case | 3500 | 3000 | 3000 | 3000 | 4500 | 3000 | 4500 |
| Antitoxinin used | Gibier | B of H | B of H | PD&CO | PD&CO | PD&CO | PD&CO |
| Intubation | 1st day. | | | | 2d day. | | |
| Tube retained | 3½ days | | | | 2½ days | | |
| Recovery | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

As to the medicinal treatment, I do not give any drug with the idea of influencing the course of the disease. I treat the conditions as they arise symptomatically. If I have evidence of the absorption of poisonous secretions, and a coated tongue, I give calomel tablet triturates, ½ grain every hour, until the bowels move freely. Alcohol is rarely needed in cases receiving the serum treatment, especially if it is used early enough, whereas, under the old treatment, when we were so apt to find profound toxic symptoms, alcohol was more often needed. It is perhaps well to state here that I prefer fluid nourishment, principally milk, during the course of the disease.—*W. A. Walker, M.D., of New York, in Pediatrics.*

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Picric Acid, a drachm to two ounces of alcohol and twenty of water, is highly recommended as an application by compresses to burns. The solution is commended as being soothing, antiseptic, and non-poisonous. Two or three applications at intervals of several days are usually sufficient.—*Denver Medical Times.*

NEW AND SUCCESSFUL TREATMENT FOR HAY FEVER.—Dr. W. F. Strangways, in *Annals of Ophthalmology and Otology* January, 1896: After showing how untenable the theory of direct irritation by pollen on sensitive areas is, the writer proceeds to explain his views—which briefly are that the cause is found in toxin generated from pollen by a fermentative process in an alkaline solution. This toxin produces a vaso-motor paresis with disordered secretions, which by irritation cause paroxysms of sneezing.

Neutral and alkaline solutions but little affected the pollen, whilst very dilute acid solutions caused a rapid formation of a grayish exudation. This the writer took to show that alkaline solutions assisted to form this toxin, and the acid prevented it by causing other changes. His treatment consists in the use of a douche, using a solution containing acetic acid 2 min., salt 4 grs., resorcin 2½ grs., water 1 oz. The resorcin is not always needed. Internally he administered hydrochloric acid, one to two drachms daily. In many instances the douche is sufficient alone.—*Atlantic Medical Weekly.*

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DYSMENORRHŒA.—Dr. H. Talley (Philadelphia Polyclinic) states that a mixture of caffeine, potassium bromide, and tincture of gelsemium is of much value in the treatment of dysmenorrhœa. This should be administered for a few days before menstruation. —*Notes on New Remedies.*

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TIME OF RUPTURING THE AMNIOTIC SAC IN LABOR.—1. In multiparæ, rupture when os is fully dilated. 2. In primiparæ, delay until the soft parts are also dilated. 3. In cases of face and breech presentation, delay in rupturing the sac is best. 4. When the pelvis is small and the fœtus large, delay rupturing. 5. In premature labor, with a dead fœtus, rupture early. 6. Rupture the sac early when the membranes are unusually thick, tough, and unyielding. 7. When speedy delivery is demanded, rupture early and dilate with the fingers. 8. Rupture the sac when an excessive amount of amniotic fluid retards labor. 9. When version is necessary, and can be accomplished by bimanual

manipulation, perform this operation before rupturing. 10. Remember that a dry labor is always to be deprecated; hence do not rupture at all, unless for good reasons and the case demands it.—*Atlanta Medical and Surgical Journal.*

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ELECTRICITY IN MINERAL WATERS, AND ITS THERAPEUTIC INFLUENCE.—It has very generally been claimed that artificial mineral waters are far less efficacious than are the natural waters themselves, and it is known that many watering places produce effects upon patients submitted to the regimen there prescribed which cannot be explained upon the basis simply of the chemical composition of the water. Several learned authorities have ascribed this to the negative electricity with which the water is charged. Zinno (Bolletino Chim. Farm.) attributes the unexplained therapeutic activity of these waters to electricity, but believes that the electricity is generated to a certain extent by chemical changes which occur in the constituents of the water. The electrical energy contained in the waters, as indicated in the galvano-meter, disappears more rapidly where the water is contained in closed vessels than when left open. It sometimes disappears within a few hours, and sometimes not until within several days after the water has been taken from the earth.—*Scientific American.*

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MALIGNANT DISEASE OF UTERUS.—1. Cancer of the cervix uteri, if left without surgical interference, always kills. 2. The disease in most instances is primarily a local process. 3. Early hysterectomy will cure quite a percentage of these cases. 4. The microscope, while a great diagnostic aid, is not infallible in its findings. 5. The experienced surgeon is warranted in resorting to hysterectomy, even in doubtful cases. 6. Every malignant gravid uterus should be removed before the disease has advanced beyond the period of a probable cure.—*Cordier, Tri-State Medical Society, Chicago*, April, 1896.

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CODEINE FOR SURGICAL PAIN.—Too much morphine is given to surgical cases—not enough codeine. The latter drug controls

pain nearly as well as morphine when administered hypodermatically, and has none of its objectionable features. In abdominal surgery particularly it is valuable, as it does not interfere with intestinal movement. It may be given in doses of one to three grains internally, every three or four hours as needed to subdue pain; and from half to one grain hypodermatically.—*American Journal of Surgery and Gynecology.*

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A NEW TEST FOR SUGAR IN THE URINE, devised by Dr. A. R. Elliott, and claimed to be most accurate, is as follows:

Solution one:

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| R | Cupric Sulphate | 27 grains. |
| | Glycerine (Pure) | 3 drachms. |
| | Distilled Water | 2½ drachms. |
| | Liq. Potassæ | 4 ounces. |

Dissolve the cupric sulphate in the glycerine and water, and gently heat. When cold, add the liquor potassæ.

Solution two.—A saturated solution of chemically pure tartaric acid.

These solutions are quite stable, and keep indefinitely.

Into a test tube pour a drachm of the cupric acid solution. Boil gently over a spirit lamp. Then add two or three drops of the tartaric acid solution, and boil again. The urine is now added slowly, drop by drop, until eight drops are added. If no reaction takes place by this time there is no sugar. The reaction is a yellowish or reddish or greenish-gray deposit of suboxide, which is marked and unmistakable. In a few minutes the reaction deepens.—*Philadelphia Medical and Surgical Reporter.*

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ITCHING.—I wish to call attention to a remedy which has served me excellently in a considerable number of cases of eczema, and also somewhat in other pruritic eruptions, during the past two years, and which I am prescribing with increasing confidence.

It is quite possible that its use is known to many, but as I learned it accidentally from a patient, and have not seen it mentioned in text-books or journal articles, I feel that it cannot be very widely employed,

Briefly, it is simply a solution of permanganate of potassium in water, in a strength from 1 to 2 per cent., or possibly stronger in certain cases. This is brushed or mopped over the surface and allowed to dry, which it does very quickly. The well-known brilliantly-pink or magenta-colored fluid turns very soon to a medium dark-brown, staining the skin for some little time, and is finally thrown off by exfoliation of the tissues which it has oxidized.

Thus far I have used it mostly on subacute exzema, exhibiting patches of erythematous or papulo-squamous surface. I have not commonly employed it on moist or weeping surfaces, but recently a patient applied it to such on the thigh with most beneficial effects. It may sting or smart a little if the surface be at all abraded, but this is never complained of, and patients speak only of the immediate relief from the itching in the part which it affords.—*Dr. Bulkley, in New York Medical Record.*

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Dressings.—Any surgical wound dressing should be absorbent, to admit of the ready impregnation with medicinal substances and to absorb discharges. The substances in most common use are lint, absorbent cotton and gauze, tow, oakum, jute, wood wool, moss, peat, and pine sawdust.—*American Text-Book of Surgery, p.* 1,159.

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If castor oil is applied to a wart once a day for a month the wart will entirely disappear. In many cases it will not require so long a time:—*Scientific American.*

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Was it a Misprint?—A newspaper article about a railroad accident reads thus: "Dr. Chargem felt of the injured man's purse and then prescribed for him."—*Modern Medicine.*

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Sander & Sons' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

TYPHOID FEVER AND THE PUBLIC WELL.—The little village of Hannibal, Monroe County, Ohio, on the Ohio river, thirty-five miles below Wheeling, W. Va., has been suffering severely from typhoid fever, more than eighty cases and eight deaths having occurred in a population of 600 or more.

The village had been free from typhoid fever for a number of years, until in June, of the present year, a man who had been employed on the river steamer, "Ben Hur," was brought home sick with the disease. No precautions were taken to disinfect the stools of this patient, which were thrown into a privy without a vault, about fifty feet from a well which was so greatly prized for its palatable water that it was used by a large number of the villagers. Leading from this well is an uncemented drain which carries off waste-water from the pump and also from the house.

About two weeks after this patient came home, other cases of typhoid fever began to appear, and in less than another week the only physician in the village had forty cases of the fever on his list. At that time he, too, came down with the disease. Of the eighty or more persons sick nearly all of them used water from this well. Six cases occurred in persons living on farms near the village who came there to trade. All of these persons drank water from this well.

All of these cases were not reported as typhoid fever, many of them presenting symptoms of malaria, but there is reason to suspect that all were typhoid.

The well was closed by order of the State Board of Health on August 7, 1896. Since that time two cases have been reported in the village, but no new cases since.

A chemical examination of the well water showed it to be high in organic matter and chlorine, and there can be little doubt as to its having been specifically contaminated.

While the disease has apparently come to an end in the village, it has continued to spread in the country adjacent.—*Atlantic Medical Weekly.*

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THE British Medical Association has 16,332 members. The entire number of medical practitioners in the Kingdom is 27,392.

PREVENTIVE MEASURES AGAINST TYPHOID FEVER.—The same report contains many valuable hints concerning the rules to be observed by the nurses in care of typhoid fever patients, rules calculated for the protection of the well, and which are equally applicable to cases of tuberculosis. In regard to the management of dishes it says:

"Dishes and eating utensils should be kept exclusively for the patient, and after use should be boiled for fifteen minutes in water containing sal soda, then rinsed in clean water. All food brought into the sick-room and not consumed by the patient should be burned."

Concerning the disposition of stools—something which is equally as applicable to cases of tuberculosis and cholera as to those of typhoid—this report adds:

"The excretions should be received in a vessel containing a small portion of milk of lime—composed of freshly slacked lime and diluted with four times its bulk of water—to which a liberal addition should be made afterwards, and the whole intimately mixed by stirring with a stick. It should stand a half hour or more before being buried. Milk of lime is the most valuable agent for the disinfection of typhoid and cholera stools we have. The practice of suspending towels and sheets about the sick-room, saturated with carbolic acid and other odorous solutions, is not to be commended. It has little other effect than to cause frequently nausea and headache in the patient and attendant.

The body and bed linen should be changed daily. Never shake them. As soon as removed immerse them in a disinfecting solution composed of carbolic acid and water (one part to forty), or in a bichloride of mercury solution (one to one thousand). Let them soak four hours or longer, then boil them for half an hour and wash with soap. The rubber sheet should be thoroughly sponged with the carbolic solution, then dried and aired in the sun for several hours.—*Pacific Med. Jour.*

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A CASE OF ULCER OF THE STOMACH TREATED WITH PROTONUCLEIN.—My experience with Protonuclein has been limited, but in all the cases in which I have used it I have been quite successful, especially so in the one which is reportod below.

Mr. J., aged twenty-four, farmer by occupation, became one of my patients some two years ago, when he presented the following symptoms: For a long time he had been troubled with inability to retain food. There would be severe pain in the stomach, which would be increased by the presence of food and by pressure over region of stomach. This pain would be relieved by vomiting, sometimes there would be vomiting of blood; bowels constipated, tongue covered with thick coating. I tried several remedies at that time, such as pepsin, bismuth, nitrate of silver, aromatic powder, Carlsbad salts, mustard over epigastrium, etc., together with a strict diet. This course of treatment was followed by temporary improvement, but no real improvement. He finally left me utterly discouraged and came under the care of other physicians, but with apparently no better success. About two months ago he returned to me, very much reduced in flesh, his weight having dropped from 160, his normal weight at the beginning of the trouble, to 124 pounds, and every symptom increased in its severity, and so weak and exhausted was he that he was unable to follow his usual occupation.

I straightway put him upon a strict diet again, and gave him Protonuclein, grs. iii, every four hours, to be taken religiously. From the beginning of the administration of Protonuclein he began to improve, and gradually to retain food. The pain began to diminish and he gained fully ten pounds in weight within the first two weeks. His appetite and strength returned, and in fact there was rapid and permanent improvement. At the present time of writing he has ceased taking Protonuclein, and when I last saw him he was apparently well.—*N. H. Kirby, M.D., of Concord, Mass., in Atlantic Medical Weekly.*

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Radical Cure of Hemorrhoids by Suture, by Podreze's Method.—M. S. Golachowski (*Wratsch*). The method of Podreze is as follows: The patient being anæsthetized and the region prepared, the sphincter is dilated a little and, after having introduced a tampon of cotton in the anus, each hemorrhoidal mass is grasped at its base by Pean's artery forceps. The skin is slightly incised at the muco-cutaneous junction, if necessary. If the hemorrhoids are numerous a circular incision is made and the

vascular tumors are transfixed by a suture. To accomplish this the needle is introduced through the wound formed by the turning back of the mucous membrane and the skin incisions, it is passed all around the tumor in the submucous tissue, and is then brought out above, but still between the two lips of the wound. The suture which has thus enclosed the hemorrhoidal mass is tightened and tied. Each tumor is surrounded in the same manner, then the hemorrhoidal masses are cut off below the forceps and the mucous membrane is sutured to the skin in the line of the incision. A large twisted drain of iodoform gauze is introduced and a dressing applied. The author, who reports several cases operated on by this method, finds that it presents marked advantages over the other operative procedures; first, the operative technique is simple, easy and requires very few instruments; second, the operation is completely without pain; third, the operation may be performed very rapidly; fourth, the loss of blood is insignificant; fifth, the cure is rapid; at the end of ten days the patient is able to leave the hospital; sixth, this method has never given rise to complications nor to trouble of defecation, the cicatrix is flexible. Therefore, the author concludes that the method of Prof. Podreze answers to all the conditions of an ideal operation for hemorrhoids. (*Gazette des Hopitaux*, March 10, 1896.)

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THE AFTERNOON NAP.—The frequency with which medical men are asked whether it is harmful to indulge in the "afternoon nap" is not, perhaps, surprising, for several reasons. Most persons have had experience of the seductive charms of the somnolence which has followed the comfortable ingestion of a midday or evening meal. The meal finished, the diner arranges himself comfortably in an armchair; it may be he lights a pipe or cigar, takes up a newspaper, and prepares to make the most of the restful conditions of his mind and body. But nature soon begins to assert her sway. In time, the eyelids close, the head begins to nod, the newspaper falls from the hands, the pipe, no longer supported in the mouth, falls to the floor, and the symptoms of a nap are complete. Whether the "winks" be forty or one hundred in number, the result is the same—a short, sound

sleep. Then cames the question—Is it harmful thus to fall asleep after a meal? By no means; for the very obvious reason that the process is merely a physiological one, and as such, when it occurs, is quite natural. When digestion is in progress, nature has arranged that all the available blood in the body shall be collected in and about the digestive organs. Consequently, the blood supply to the brain falls to a low ebb, and thus sleep is easily induced. On the other hand, of course, physiologically, it is wrong for brain work to be attempted immediately after a solid meal.—*Medical Progress.*

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Local Treatment of Gout.—Dr. William Murrel (Lancet) gives the following method, which he has employed with success: "I take half an ounce of iodide of potassium, dissolve it in half a pint of rectified spirit—methylated spirit is used in hospital practice—add one ounce of soap liniment, and then one-half drachm each of oil of cajeput and oil of cloves. A piece of lint is soaked in this mixture, wrapped round the affected part, covered with a protective, and kept in place by a bandage. It acts as a powerful counter-irritant, and the inflammation usually subsides in from twelve to twenty-four hours. In addition, I not uncommonly give a drachm of colchicum wine with ten grains of iodide of potassium three times a day. These large doses of colchicum wine induce brisk purgation, sometimes accompanied by vomiting, but they speedily cut short the attack. This mode of treatment is especially useful in the case of robust, full-bodied men in active employment, to whom the loss of a day's work is a serious consideration. In sciatica, lumbago, and rheumatism affecting one joint, the local application of a liniment containing half an ounce of salicylate of sodium, half a drachm of oil of cajeput, fifteen minims of oil of eucalyptus, and half an ounce of soap liniment in six ounces of rectified spirit affords prompt relief."—*N. Y. Medical Record.*

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Sublimate Injections in Pernicious Anemia.—Patera (Rif. Med.) reports the case of a lady, aged 33 years, seen by him in January, 1895, with a history of severe anemia, fever,

vomiting, insomnia, and extreme debility of a year's duration, and attributed to severe uterine hemorrhage in the early part of 1894. The usual remedies were tried, but with very little success. The red blood corpuscles were very much diminished in number. There was no albuminuria and no hematuria. Some blood was vomited on one or two occasions. Temporary improvement followed the author's treatment, but when next seen in December, 1895, the patient reported herself no better. Daily injections of 5 mg. of sublimate were then practiced for the space of two months, with excellent results. The anemia disappeared, and the patient radically improved, put on flesh, lost her palpitation, giddiness, and sense of fatigue, and felt well in every way. The author refers to another case of severe anemia successfully treated in the same manner. It raises the question whether pernicious anemia may not be due to some hitherto undiscovered germ which is killed by the germicidal action of the sublimate.—*British Medical Journal.*

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Gallic Acid as a Hemostatic.—The author advocates the use of gallic acid as a hemostatic, having found it to exert a powerful influence over all forms of passive hemorrhage when taken internally, and recommends it in purpura, epistaxis, hematuria, hemoptysis, menorrhagia, and intestinal hemorrhage, as it may prove useful in those affections. It was also found to be valuable in excessive diaphoresis of nocturnal or other form, and in polyuria. It may be given in doses of from 5 to 20 grs. (0.3 to 1.25 gme.), at intervals as indicated by the urgency of the symptoms; although in the writer's experience it was found necessary to administer but one dose daily, usually at bedtime. As far as the author's experience in and observation of a number of cases could determine, the beneficial results obtained are due to its power of increasing the coagulability of the blood.—*Jas. A. Freer in Med. Coun.*

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Modification of Chopart's Amputation.—Dr. Senn has introduced a novel and important modification of Chopart's amputation of the foot. It is well known that after this operation

the tendo Achilles often contracts and throws the end of the stump forward, so that the patient walks on the corner of the stump instead of the plantar surface. At best there can be no voluntary flexion or extension, and no elasticity to the step. To obviate this Dr. Senn dissected out the flexor and extensor tendons and brought them together over the stump, lapping them so as to give ample room for stitching them together. The patient, a young man, made an excellent recovery, with the most beautiful results. The tendons united so that perfect flexion and extension was secured. This result will certainly give the person a much more natural and elastic step in walking. This is the first instance on record where the tendons were united over the end of the stump in Chopart's operation, and it reflects credit upon the skill and ingenuity of Dr. Senn.—*Medical Sentinel.*

# Editorial.

## "HARD TIMES COME AGAIN NO MORE." (?)

Not being a prophet, nor the son of a prophet, we cannot attempt to answer the above either in the negative nor the affirmative—possibly only those who may reach the millenium will be able to thoroughly and perpetually enjoy an occurrence so 'muchly' to be wished for. However, before this modest pencil shover will be called upon to prepare editorial matter for the many readers of this journal again, the quadriennial storm that so regularly sweeps over this grand country will be among the things of the past, and the Bezonian, whether living under Imperial Aurum or Kingly Argentum, may confidently expect better times, and will certainly realize a more satisfactory business progress.

While considering a political question entirely out of place in a medical journal, we firmly hold to the opinion that doctors, no matter how intense their devotion to their profession, should not altogether ignore questions of political economy. It is a learned profession and its devotees should be well informed in every respect, and while we hold that all medical men should be religious men, well versed in the doctrines that their mental acumen and their convictions most approve, we feel no more authorized in dictating to them or advising any particular form of religious belief than we do a political creed. But we hope that all will feel sufficiently interested in all political movements to give to them some of their best thoughts and most earnest consideration, and do their whole duty as American citizens by voting accordingly, and in the event that

their opinions are not endorsed by a majority of the voters of this great republic, to quietly and honorably acquiesce; fully believing in that axiom of royalty "the king can do no wrong," and the American people in their majority being accepted as the most royal of kings, certainly must be right.

The great political storm of 1896 that will have spent its force and exhausted its fury prior to the ides of November has been a most momentous one. This republic, greater in numbers and with more diversified interests than at any day in its previous history has been stirred from center to circumference, from turret to foundation stone, and in all its great history no political movement has so attracted the attention of so great a mass or proportion of its people. While one of the leaders of one of the great political parties—where division has not been as in some qudriennial seasons past between those who are in office and those who want to get in, but divided upon important and practical questions of political life—has been touring the land from the great lakes of the North to the sunny South, impelling immense throngs, aye, even multitudes, to listen to his discourse, with a physical endurance that has seemed almost superhuman; and another leader of the other great political party has been attracting to his home great train loads of American citizens from all parts of the land, entertaining them with a dignity and courtesy that was worthy the most royal or imperial of all mankind, a true American citizen; on the hills and in the hollows, on the plains and mountains, in rural retreat or crowded metropolitan mart, the entire American populace have been both singly and collectively enwrapped in the folds of political discussion. Out of this we hope but good can come, and with a belief in the true principles of our government that the right will prevail, and whether our personal views may be fated to fall on the side of the minority or majority, whether the next four years of this government are to be controlled by the single gold standard or the free and unlimited coinage of the white metal, believing that whichever prevails will prove to be right, we cannot but hope and believe, that even if "hard times come again," it will not be quite as "tough and rocky" as it has been for some years past. Having passed through some eventful political periods, even one that culminated in a four years civil war, when all seemed wreck and ruin, an almost chaotic whirlpool, we have witnessed each one in its time subside and good come out of it.

We cannot hold with the extremists of one side that business prosperity is doomed unless the double standard currency is adopted; nor with the other, that all business integrity and political honor is lost without monometalism. While these are questions not seemly for discussion in a scientific or professional periodical, yet they are questions for the most careful consideration of our doctors and scientists, as well as for every intelligent and rational man in the broad land. Our country is too great, its interests too diversified, its place in the fields of nations too important to be sacrificed with the failure of one side or the other. The quadriennial upheavals at their culmination have ever had more or less a

prostrating and paralyzing influence on all branches of business, and whatever depresses general business matters has a like ill effect upon medical men as upon others; yet the general depression and condition of unrest attendant upon this culmination has ever, sooner or later, given way to more prosperous and propitious times. The ebb has been followed by the tide, and as it has been in the past, so will it continue to be; therefore let us all be on the "*qui vive*" to take advantage thereof and reap the benefits therefrom.

In closing our volume of 1895, we congratulated ourselves that "our modest little journalistic venture had nobly held its own," and that "during the 'passing of the hard times' its business propensity had never waned in the least," and "the good year 1895, then closing, would always be remembered as one of the most successful and satisfactory of any of the seventeen years of its existence." And now, nearing the close of another volume, thanks to the kind and earnest support of the many friends, who, notwithstanding the "hard times," scanty collections, and scarcity of money, have more satisfactorily than ever sustained it, we feel that we have given them a better journal than ever; and finally, as the country has been saved again, by one party or the other—and at this writing we cannot tell who will have the credit and honor thereof—we feel no hesitation in assuring our many friends and readers that we are more encouraged than ever, and will promise them that we will in no wise relax our efforts, and hope in the good times to come to still retain the satisfactory and agreeable relationship we have sustained in the past.

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SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.—The ninth annual meeting of this Association will be held in Nashville, Tenn., Tuesday, Wednesday, and Thursday, November 10th, 11th, and 12th, 1896. The Nicholson House has been selected as headquarters for the Association. The rates will range from $2.00 to $4.00 per day. Arrangements have been made with the Southern Passenger Association for reduced rates on the certificate plan. These certificates, properly signed, will entitle those who attend to a return ticket at the rate of one-third of one full fare. Those who contemplate attending the Pan-American Medical Congress, to be held in the City of Mexico, November 16th–19th, will have time to do so after the meeting of the Southern Surgical and Gynecological Association. A rate of one fare for the round trip has been made on account of the Congress, stop-over privileges being allowed holders of tickets therefor.

The following is a partial list of the papers to be read:

1. President's Address, E. S. Lewis, M.D., New Orleans, La.

2. Memorial Address on Dr. Paul F. Eve, Richard Douglas, M.D., Nashville, Tenn.

3. Acute mania following surgical operations, Joseph Price, M.D., Philadelphia, Pa.

4. Cholelithiasis, with report of cases, A. M. Cartledge, M.D., Louisville, Ky.

5. Treatment of carcinoma uteri, Jas. T. Jelks, M.D., Hot Springs, Ark.

6. Maternal impressions and their influence upon the fœtus in utero; illustrated by photographs, C. H. Mastin, M.D., Mobile, Ala.

7. Ureteral anastomosis, J. W. Bovee, M.D., Washington, D. C.

8. Compound comminuted fracture of the radius and ulnar, near the wrist joint, H. M. Hunter, M.D., Union Springs, Ala.

9. Enchondroma of the pelvis, with report of a successful operation, Rudolph Matas, M.D., New Orleans, La.

10. The treatment of pregnancy and labor complicated by fibroid tumors of the uterus, Henry D. Fry, M.D., Washington, D. C.

11. Uterine drainage as a factor in the prevention and relief of pelvic inflammation, R. R. Kime, M.D., Atlanta, Ga.

12. Splitting the capsule for nephralgia, with report of cases, George Ben Johnston, M.D., Richmond, Va.

13. Gun shot wounds of the abdomen, W. E. Parker, M.D., New Orleans, La.

14. Vaginal drainage in surgery of the uterus and other pelvic structures, W. H. Wathen, M.D., Louisville, Ky.

15. Mental complications following surgical operations, J. T. Wilson, M.D., Sherman, Texas.

16. Tracheotomy versus intubation, Chalmers Deaderick, M.D., Knoxville, Tenn.

17. The treatment of inevitable abortion, Virgil O. Hardon, M.D., Atlanta, Ga.

18. Some remarks on fractures, W. F. Westmoreland, M.D., Atlanta, Ga.

19. Hypodermoclysis in severe railway injuries requiring multiple amputations, James Evans, M.D., Florence, S. C.

20. Wounds of the liver, with report of cases, S. M. Fortier, M.D., New Orleans, La.

21. Peculiarities of the surgical diseases and injuries of the neck, Edmond Souchon, M.D., New Orleans, La.

22. Clamps instead of ligatures in vaginal hysterectomy, H. S. Cocran, M.D., New Orleans, La.

23. Contributions to the pathology of adherent placenta, Bedford Brown, M.D., Alexandria, Va.

24. The dry method in intra-uterine surgery, Edwin Walker, M.D., Evansville, Ind.

25. Subject to be announced, J. D. S. Davis, M.D., Birmingham, Ala.

26. Subject to be announced, L. S. McMurtry, M.D., Louisville, Ky.

27. Subject to be announced, W. B. Rogers, M.D., Memphis, Tenn.

28. Subject to be announced, George H. Noble, Atlanta, Ga.

29. Subject to be announced, N. P. Dandridge, M.D., Cincinnati, O.

30. Subject to be announced, Geo. J. Engelmann, M.D., St. Louis, Mo.

31. Subject to be announced, Jas. McF. Gaston, M.D., Atlanta, Ga.

32. Subject to be announced, Cornelius Kollock, M.D., Cheraw, S. C.

33. An experimental study of bile in the peritoneal cavity, W. E. B. Davis, M.D., Birmingham, Ala.

34. Discussion on appendicitis.

35. Discussion on vaginal versus abdominal section for pus in the pelvis.

Correspondence is pending concerning other papers. The permanent programme will go to press October 20th.

Members of the Medical Profession are cordially invited to attend.

Dr. W. D. Haggard, of Nashville, is Chairman of the Committee of Arrangements.

E. S. Lewis, M.D., President.

W. E. B. Davis, M.D., Secretary.

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The Middle Tennessee Medical Association will meet in Lewisburg, Marshall County, on the 19th and 20th of November. The following is a partial list of papers to be read:

Second Summer Complaint of Children, Dr. A. B. Ramsey, McMinnville, Tenn.

Presentation of Morbid Specimens of (*a*) Acute Ulcerative Colitis; (*b*) Perforated Typhoid; (*c*) Acute Miliary Tuberculosis, Dr. Hazle Padgett, Columbia, Tenn.

Eczema, Dr. Garrett White, Chapel Hill, Tenn.

Simple Goitre and its Treatment, Dr. H. R. Caston, Fayetteville, Tenn.

Disseminated Sclerosis, Dr. J. W. Grisard, Winchester, Tenn.

Insomnia, Dr. C. L. Lewis, Jr., Nashville, Tenn.

Injuries to the Pelvic Flood, Dr. M. C. McGannon, Nashville, Tenn.

A Plea for the more Careful Hygienic Management of the Children in Families Predisposed to Phthisis, Dr. Llewellyn P. Barbour, Tullahoma, Tenn.

Report of a Case of Labor, in which there was Complete Obliteration of the Os Uteri, Dr. F. B. Ragor, Flat Creek, Tenn.

Anæsthetics in Normal Labors, Dr. C. N. Cowden, Petersburg, Tenn.

Venesection, Dr. Jas. B. Stephens, Nashville, Tenn.

Malarial Remittent Fever, Dr. Jas. K. P. Blackburn, Lynnville, Tenn.

Criminal Abortion, Dr. A. J. Swaney, Gallatin, Tenn.

Criminal and Justifiable Abortion, Dr. C. C. Abernathy, Pulaski, Tenn.

The Abuses of Opium, Dr. J. R. Buist, Nashville, Tenn.

Skin Tuberculosis, Dr. C. R. Atchison, Nashville, Tenn.

The Manifestations of Syphilis in Children, Dr. John M. Bass, Nashville, Tenn.

Plastic Surgery in Gynecology, Dr. W. D. Haggard, Jr., Nashville, Tenn.

Serum Therapy in Diphtheria, Dr. J. D. Plunkett, Nashville, Tenn.

A paper by Dr. T. H. Wood, Nashville, Tenn.

Some Observations on Electricity from a Physiological Standpoint, Dr. G. P. Edwards, Nashville, Tenn.

A paper by Dr. J. W. Handly, Nashville, Tenn.

Presidential Address, Dr. J. S. Cain, Nashville, Tenn.

A cordial invitation is extended to the profession to attend the meeting, which is expected to be one of the most noteworthy in the history of the organization.

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PAIN RELIEVED WITH UTMOST SAFETY.—Albert M. Williams, A.M., M.D., of Bradford, Pa., says: "I have used antikamnia in my practice since its first introduction and used it extensively. At first I was a little cautious and a little apprehensive, and rarely ventured on larger doses than five grains; but for several years I have given it in ten and fifteen-grain doses to adults, and when needed, repeating every hour or two hours. I have rarely been disappointed in controlling pain, if the pain was of a character to be controlled by medicine. In severe neuralgias or any severe form of pain, my method is to prescribe ten grains to be given every hour till the pain ceases. I seldom use morphia or opium in any form. I have seen so many unfortunate victims of the opium habit that I shun its use, and antikamnia is my sheet anchor. The effects of opium and its alkaloids, too, are most disagreeable to many people. I always suffered untold misery when I had taken even a small dose of morphia; itching and nausea especially continuing for about two days. There is none of this following the use of antikamnia, and I have never heard of a victim of the antikamnia habit. I have yet to see the first case where any alarming symptoms have followed its administration. I have for a long time been in the habit of prescribing it in a little larger doses than are recommended, and any bad results from its use must be due to some idiosyncrasy on the part of the patient."

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DIPHTHERIA is not always of easy diagnosis, and more especially in the early stages, when its timely recognition is of the greatest importance. The Nashville City Board of Health is to be commended for its recent action in appointing Dr. Larkin Smith as Bacteriologist for the city, and having convenient arrangements made to furnish culture outfits from fifteen places located in different portions of the city. These culture outfits are furnished free of cost to any physician in the city on application, and contain specific instructions for use, and when used will be returned to the station from which it was procured. The outfits will be collected daily between 2 and 3 P.M., but may be sent direct to the City Health Office. Report of the result of the bacteriological examination will be telephoned on completion, if desired, otherwise will be sent by mail next day. Few men engaged in general practice having the time, training and means for a bacteriological examination, his measure of the local health authorities,

which for want of funds is so far limited to the diagnosis of diphtheria, is an important one, the results of which can but result in great good and a future more comprehensive development of the enterprise.

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GOLDEN NUGGENTS OF TRUTH from three able and experienced observers.

LAWSON TAIT writes: "I have found Fellows' Syrup of Hypophosphites very useful in the special diseases of women where anæmia is the leading symptom."

DR. MILNER FOTHERGILL wrote: "The combination (Fellows' Hypophosphites) is an excellent one—the best yet made—to my knowledge. It is a happy thought. It is a good all-round tonic specially indicated when there is nervous exhaustion. It is readily digestible, and has given much satisfaction in my experience of it."

THOMAS MORE MADDEN, ESQ., M. D., F. R. C. S. E., wrote: "There can be no question as to the therapeutic value of Fellows' Syrup of Hypophosphites as a tonic, especially in the treatment of many of the chronic wasting diseases of childhood. I consider it one of the most generally serviceable remedies in several of the chronic strumous tubercular disorders of youth."

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A DIRTY MESS.—Some of our medical journals have had more or less to place before their readers in regard to the Klebs Antiphthisin. The facts are that Klebs came to this country in the recent past and made application for a patent on his preparation. He subsequently became connected with Karl von Ruck and the Winyah Sanitarium at Asheville, N. C., assigning his patent to the Company. Later he severed his connection with the Asheville Combination and moved to Chicago.

His application for a patent was in violation of the Code of Ethics, which was also violated by von Ruck by his association therewith. While he had an undoubted legal right to apply for a patent, and so had von Ruck to become associated therewith, yet by so doing they placed themselves without the pale of honorable medicine, and deserve no recognition at the hands of its members or the regular medical journals connected therewith other than a statement of the facts. Having made their bed, let them lie in it, and if its rosy promises of sordid gain are not redeemed they can only blame themselves.

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TAKE ADVANTAGE OF YOUR OPPORTUNITY.—Our readers will please read the advertisement of *The American Practitioner and News*, a bi-weekly Journal of Medicine and Surgery, published in Louisville, Ky., and edited by Drs. David W. Yandell and H. A. Cottell, Professors in the Medical Department University of Louisville. For only TWO DOLLARS

AND FIFTY CENTS you will receive that Journal the remainder of this year and *during the entire year* 1897, together with this Journal. The regular suscription price of the American Practitioner and News is Three Dollars per annum. It is the oldest journal published in Kentucky, and has long held an enviable position. It publishes forty pages of most excellent Original Articles, Proceedings of Societies, Abstracts, Selections, Editorials, etc., twice each month. This offer only holds good until January 1, 1897. Send along your names and subscriptions at once.

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HUGH R. MILLER, M.D., Professor of Operative and Clinical Surgery in the Medical Department of the University of the South (Sewanee Medical College), has made arrangements to give a series of courses of instruction to special classes in Operative Surgery during the winter in this city. Gentlemen desiring to perfect themselves in the latest ideas of surgical technique and operative procedures will do well to avail themselves of the opportunity offered.

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WE ARE indebted to the bacteriologists for many things, but they have taught us nothing of more practical value than the lesson that a large number of our minor complaints, and a thousand-and-one of our aches and pains, which make life miserable, come from auto-intoxication. The ever present germs in the alimentary tract manufacture their toxines, and these are absorbed much to the distress, if not to the actual danger, of the individual. The good old-fashioned theory that you must "keep the bowels open" if you wish to enjoy perfect health thus finds a scientific explanation in these latter days. It is now simply a question of common sense: Keep the alimentary canal free from the poisons of germ life. You can not do this better than by using California Fig Syrup. It is pleasant to the palate, and prompt to give relief.

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THE CHARLOTTE MEDICAL JOURNAL is a credit indeed to the "Old North State," and as a Tennessean we feel duly gratified at the success it has attained. Though younger than this JOURNAL, it is edited and controlled like it, strictly by medical men and in the interests of the profession, thoroughly independent, not under the dictation or control of any outside or other interests than those pertaining solely to the interests of the profession which it is desired to build up and uphold. It is especially to be commended for its abstracts of articles appearing elsewhere, in many instances prepared by the author. Well printed, brilliantly edited, we have but one wish for it—that like a "tar-heel" it may in its good work stick to the last.

SPECIAL CLASSES IN OPERATIVE SURGERY.—Commencing November 1, 1896, I will conduct Private Classes in Operative Surgery. This work will be restricted to advanced students and practitioners, and each class will be limited to six. The course will embrace all the important operations on the cadaver, as well as experimental work on animals. Each member of the class will be given ample opportunity to learn the technique of the different operations and to become accustomed to the art of operating. Physicians desiring to devote their time to special work can make arrangements accordingly. The course will consist of twenty-four lessons. Fee, $10. Particulars will be furnished on application.

HUGH R. MILLER, M.D.

529½ Church Street, Nashville, Tenn.

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ABOUT eight weeks since, I was called to see a patient of Dr. L's. We found her with excruciating pains in the hepatic region, constant vomiting with distress in the stomach, in fact, could keep nothing down for a couple of days. Enlarged liver easily felt below the costal margin, very sensitive, so much so that we strongly suspected malignant disease. The symptoms were discouraging decidedly, as the doctor had given her nearly every medicine used in hepatic diseases without relief. I suggested "Peacock's Chionia," it was given and she began to improve, and at this date she is as well as usual. It certainly was an efficient remedy in her case, and the result deserves recording. F. W. BATHRICK, M.D.

Battle Creek, Mich.

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P. N. DE DUBOEAY, M.D., F. R. C. S., of Tallulah Falls, Rabun County, Georgia, September 22, 1896, writes:

I have used Papine, Bromidia and Iodia extensively in my practice, and expect to continue doing so, as these preparations undoubtedly are of great value. I have found your Iodia specially useful in cases of menstrual disorder generally, and as an alterative. Papine must of necessity come greatly into vogue with the general practitioner, relieving pain as it does without unpleasant after-effects. It was of great value to me in treating the pain in a female suffering with (incurable) cancer.

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ANGIER'S PETROLEUM EMULSION WITH HYPOPHOSPHITES is an ideal substitute for cod liver oil. It is a known increaser of weight, with no disgusting taste and no stomach disturbance. If used, the stoppage of cough will soon demonstrate its value.

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IN CASES OF PERNICIOUS, PROGRESSIVE ANEMIA IN YOUNG GIRLS, no matter from what cause, Dr. Mary Ward Mead, Camden, Ill., writing, says: "The arrest of development of the generative organs retards cure,

I am early on the track for a speedy development in those slow puberty cases, and when I see the dormant spot puff for a mammary gland, I know that restoration will surely follow, and to arouse this slumbering, sympathetic and vaso motor system, Sanmetto is truly great."

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NEW ORLEANS POLYCLINIC.—The tenth regular session of the New Orleans Polyclinic will begin on January 11, 1897, to continue for three terms of six weeks each, ending May 15, 1897. Vast facilities for practical post-graduate teaching at the great Charity Hospital, at the Eye, Ear, Nose and Throat Hospital, and at the special clinics in the Polyclinic's new building. For announcement or further information, address New Orleans Polyclinic, P. O. Box 797, New Orleans, La.

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I AM pleased to say that the most excellent preparation, "Seng," has given me complete satisfaction. I can sincerely recommend it in all cases where such a delightful as well as efficacious remedy is indicated. It will afford me great pleasure to speak of its merits on all suitable occasions.

GEORGE W. BABCOCK, M.D.

Chelsea, Mass.

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

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# Reviews and Book Notices.

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PTOMAINS, LEUCOMAINS, TOXINS AND ANTITOXINS; OR THE CHEMICAL FACTORS IN THE CAUSATION OF DISEASE. By VICTOR C. VAUGHAN, Ph.D., M.D., Professor of Hygiene and Physiological Chemistry, and FREDERICK G. NOVY, M.D., Junior Professor of Hygiene and Physiological Chemistry in the University of Michigan. New (3d) edition. In one 12mo. volume of 603 pages. Cloth, $3.00. Philadelphia, LEA BROTHERS & Co. 1896.

It is now generally recognized that those diseases which cause the greatest mortality and consequently are of the greatest importance are in reality cases of poisoning; that pathogenic germs are living poisons and that every infectious disease is actually an

intoxication. Not only are there chemical factors in the causation of disease, but furthermore, specific chemical agents are now being employed in its prevention and cure. In the present volume will be found a systematic exposition of etiological, preventive and curative chemistry. The widespread interest in its department, and the acceptance of this volume as the standard authority has led to the demand for three editions. These opportunities have been utilized by the authors to keep it always abreast with the rapidly advancing knowledge in its department. The present edition has not only been thoroughly revised throughout, but also greatly enlarged, ample consideration being given to the new subjects of Toxins and Antitoxins, which have assumed great and merited practical importance of recent years.

A PRACTICAL TREATISE ON MEDICAL DIAGNOSIS. For the Use of Students and Practitioners. By JOHN H. MUSSER, M.D., Assistant Professor of Clinical Medicine, University of Pennsylvania, Philadelphia. New (2d) edition, thoroughly revised. In one octavo volume of 925 pages, with 177 engravings and 11 full-page plates. Cloth, $5.00; leath, $6.00. LEA BROTHERS & Co., Publishers, Philadelphia and New York. 1896.

For the ten years that we had the opportunity of teaching the Principles and Practice of Medicine, we endeavored to inculcate and impress the fundamental importance of a correct study and knowledge of diagnosis, and can fully endorse the following brief extract from the work before us:

"Success in treatment requires both accuracy and completeness in diagnosis. Partial knowledge of the nature of the case differs merely in degree from ignorance, and treatment based on either invites chances unjust alike to the patient and the interests of the physician."

It is the primary purpose of this most excellent work to deal with the whole subject of diagnosis in its present state of development in clear language and with abundant illustration, to afford the practitioner a consultant upon which he might rely, and to present the facts and principles in such a manner as to give the undergraduate and post-graduate student a rational grasp and practical working knowledge of this fundamental science and art.

That Professor Musser's work has easily achieved the fore-

most place as a full and systematic treatise on the practical side of its most important subject, is evinced by the prompt exhaustion of the first edition. The author has taken advantage of this opportunity to give his work a thorough revision and to incorporate in it a full account of trustworthy advances that have been made in its department, one of the most progressive in medicine. Every page shows evidence of revision and the work is enlarged not only in text, but also in illustration, numerous handsome engravings in black and many full-page plates in colors being added. The position of *Musser's Diagnosis* is assured as the leading text-book for students and equally the best reliance of the physician.

A TEXT-BOOK OF DISEASES OF THE NOSE AND THROAT. By FRANCKE HUNTINGTON BOSWORTH, A.M., M.D. Profusely illustrated with nearly two hundred engravings, and seven full-page chromo-lithographic plates; 8 vo. pp. 828. New York: WILLIAM WOOD & Co. 1896

This is the most gratifying condensation of a rather clumsy work in two volumes previously published that we have seen. It is clear, simple and practical. All that is of practical value in the two older volumes is now brought into one of convenient size. While the facile pen of the author has lost none of its charming style, the scientific character of the work seems more prominent by being condensed. This book alone places within easy reach of all practitioners and students of medicine a knowledge of the diseases of the throat and nose, a subject on which they cannot afford to be ignorant. This is probably the most valuable work on special medicine of the year. The type is clear, the text easy of comprehension, the illustrations well executed and true to the subject.

AN AMERICAN TEXT-BOOK OF PHYSIOLOGY, 8 vo., cloth, pp. 1052, fully illustrated. Edited by WILLIAM H. HOWELL, PH.D., M.D., Professor of Physiology, Johns Hopkins University. Price, cloth, $6.00, sheep or half morocco, $7.00. W. B. SAUNDERS, 925 Walnut Street, Philadelphia, Publishers. 1896.

This work is the most notable attempt yet made in America to combine in one volume the entire subject of Human Physiology by well-known teachers who have given especial study to

that part of the subject upon which they write. The completed work represents the present status of the science of Physiology, particularly from the standpoint of the student of medicine and of the medical practitioner.

The collaboration of several teachers in the preparation of an elementary text-book of physiology is quite a new departure, and the most important advantage which may be expected, the collaboration method is that the student gains thereby the point of view of a number of teachers. The various chapters are contributed by the following gentlemen, well known as authorities and careful pains-taking observers: Introduction; Secretion; Chemistry of Digestion and Nutrition; Movements of the Alimentary Canal, Bladder and Ureter; The Blood and Lymph, by the editor, Prof. W. H. Howell, of Johns Hopkins University. General Physiology of Muscle and Nerve; The Action of Locomotor Mechanisms, by Prof. Warren P. Lombard, M.D., Professor of Physiology in the University of Michigan; Circulation, by John G. Curtis, M.D., Professor of Physiology in Columbia University, and W. T. Porter, M.D., Associate Professor of Physiology in the Harvard Medical School; Respiration and Animal Heat, by Edward T. Reichert, M.D., Professor of Physiology in the University of Pennsylvania; The Central Nervous System, by Henry H. Donaldson, Ph.D., Head Professor of Physiology in the University of Chicago; Vision, by H. P. Bowditch, M.D., Professor of Physiology in the Harvard Medical School; The other Special Senses and Voice and Speech, by Henry Sewall, M.D., Professor of Physiology in the University of Denver; Reproduction, by Frederick S. Lee. Ph.D., Adjunct Professor of Physiology in Columbia University; The Chemistry of the Animal Body, by Graham Lusk, Ph.D., Professor of Physiology in the Yale Medical School.

The general style of mechanical make-up, typographical excellence and binding are in keeping with the magnificent series of text-books issued by W. B. Saunders, and it will be found to be a valuable and reliable repository of the important facts and principles of physiology, embodying the recent discoveries and developments which have characterized the history of this department of science in the last few years.

# THE SOUTHERN PRACTITIONER.

AN INDEPENDENT MONTHLY JOURNAL,

DEVOTED TO MEDICINE AND SURGERY.

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*DEERING J. ROBERTS, M.D.,* - - *Editor and Proprietor.*

Vol. XVIII. NASHVILLE, DECEMBER, 1896. No. 12.


## Original Communications.

### A NON-FATAL CASE OF ACTINOMYCOSIS IN MAN, WITH A REFERENCE TO THE PREVALENCE OF ACTINOMYCOSIS IN NORTHERN CHINA.


BY W. F. ARNOLD, M.D.

Passed Assistant Surgeon, United States Navy.


The subject of these observations, which were made late in the year of 1892 at the United States Naval Training Station at Newport, Rhode Island, was a naval apprentice, about 17 years of age, slow and very exact in his mental habits, and of a physical constitution indicative of much endurance. His exact racial position was never very clear to me. He once told me that he was born in Montreal, Canada, of a Mexican woman; but the medical recruiting officer who passed him into the Naval Training Service on June 28, 1892, must have based the description —"Gypsy"—that he gave of his complexion upon a statement of its possessor. He was extremely swarthy at the time that I

observed him, in spite of his illness and of some months of comparative protection from the sunshine.

For several years prior to his enlistment in the Navy he had been, he said, a jockey and a stable-boy in the employment of a well-known American turfman, with whose horses he had traveled almost all over the United States. He remembered, upon being questioned with careful avoidance of "leading" by me, to have seen lump-jaw in California; and he observed in the complete absence of suggestion upon my part that affected animals were often killed to prevent their infecting other stock. In the spring before his enlistment he was sick for several weeks of fever in the Charity Hospital, New Orleans, La.; and, after his discharge thence, he came up the Mississippi Valley, making the journey by wagon from St. Louis, Mo., to Rock Island, Ill., in company with a large party. One of the horses of a member of this company had lump-jaw, he said; but he was emphatic in his statement that he neither fed nor groomed this horse, nor did he have any close contact with it whatever.

Within a week after his enlistment, so he says, he had a small ischio-rectal abscess, which he treated himself, and which healed readily with only a trifling cicatrix that was somewhat involved in the local trouble there observed by me on November 1, 1892. This was an indurated mass in the right ischio-rectal fossa of the right side, and it appeared to be of about two centimetres in diameter. It disappeared after three days' rest in bed and frequent hot baths.

He gave at this time the history of a slight hæmoptysis soon after his arrival at the Station, which was on September 13, 1892; he had lost slightly in weight; and, on several occasions, he had either fainted in ranks or had "fallen out" while drilling from shortness of breath. Neither of the latter occurrences are of themselves unusual enough with boy-recruits to occasion comment; but the frequency with which they happened to him is a little outside of ordinary experience.

Physical exploration showed diminished expansion on the right side of the chest; slightly increased vocal *fremitus* on that side superiorly; dulness of a peculiarly wooden type from the right apex to three centimetres below the right clavicle, and the same distance below the superior border of the right scapula pos-

teriorly. There was bronchial breathing over the area indicated, and marked bronchophony. There was only the slightest, if any, dulness at the left apex; and no other indications of abnormality were observed about the chest, beyond a few coarse *râles*.

The liver projected about four centimetres below the costal margin; the other abdominal organs were not definitely palpable.

His temperature did not exceed 38° C. while he was under observation; and his appetite was fairly good. He had no pain, and always slept well.

There was a slight morning cough with profuse yellowish-green expectoration, in which I found bright yellow masses of a fungus while looking for elastic tissue with a low power of the microscope. I had failed to find tubercle bacilli at two examinations previously; and I did not look for them after this find, having no subsequent opportunities to do this after he had left my care, and not then suspecting further their presence.

These masses, which were not apparent to naked-eye inspection, were scattered throughout the muco-pus of three separate days' morning expectoration. The rosettes, or clusters, had under moderate powers of amplification something of the greenish-amber hue of red blood-corpuscles. They were always small (from twenty to fifty micromillimetres in diameter); and they frequently showed absence of sectors. Their component rays appeared much shorter and smaller than those represented in the commoner text-books treating of actinomyces; but their clubbed form, their dichotomous division upon pressure upon the cover-glass, and the reaction of a central filament and net-work to methyl-violet constrained me to think it actinomycosis. I am very well aware of the absence of proof positive that it was such, which cultivation tests might possibly, and an autopsy at this time presumably would have, afforded.

These are further reasons for considering it such. Fresh preparations, glycerine mounts and stained specimens were submitted at a meeting of the Newport Medical Society late in November; and the diagnosis received the concurrence of the two of its members that had observed specimens from actinomycotic human beings.

Some culture-tests that were tried with entirely inefficient apparatus failed almost as a matter of course. No offensive odor was ever noticed in fresh sputum from this patient.

The patient was transferred to the United States Naval Hospital at Chelsea, Mass., under this diagnosis on November 18, 1892, and very soon thereafter Professor Councilman found abundant tubercle bacilli in the single specimen of sputum submitted to him from the case, whereupon I transmitted a glycerine-mount similar in many particulars to the one from which the accompanying photomicrographic half-tone was made to the officer in charge of the hospital, requesting him to use it in clearing up the diagnosis. This specimen, I am told, reached Professor Fitz, of the Harvard Medical College, who remarked its interest, but who, under the circumstances, naturally retained an open mind regarding the diagnosis; and, in spite of his freely-expressed interest in the case, he never saw the patient, although he was desirous of making use of him in a clinical way.

I demonstrated the fungus to Dr. L. L. von Wedekind, of the United States Navy, in the fresh sputum of the patient in January, 1893, at the Naval Hospital at Chelsea; and, as far as I know, this was the last examination of this patient's sputum for a long interval. I am told that tubercle bacilli (but no fungus) were demonstrated soon after the patient's return to Newport.

On February 6, 1893, the subject was transferred to the Receiving Ship *Wabash*, whence he returned to the Training Station, which he soon left on the Cruising Training Ship *Portsmouth*. Her surgeon wrote me on November 25, 1893, that he was unable to do duty nearly all of the cruise of that vessel; that he had several hemorrhages from the lungs; that his profuse morning expectoration continued, but with little fever and with only slight loss of weight. He had been transferred to the Naval Hospital in Brooklyn in the early part of that month under the diagnosis of chronic pulmonary tuberculosis, and tubercle bacilli had been demonstrated in his sputum, but no fungus such as I have described. At this hospital he gained about thirty pounds in weight, and he was discharged from the service thence only this year almost, if not quite, restored to health, in spite of the tuberculosis admitted by myself and the actinomycosis denied by almost everyone else but me. I have been quite unable to trace him since he left the naval service.

He was treated rather assiduously with potassium iodide before he was transferred to the Chelsea Hospital and for some time

after he had been there; and I am told that it was re-commenced after he had returned to the Training Station, where he had an attack of acute orchitis that disappeared spontaneously with complete involution in two weeks. It was never quite fully made out to be connected with his pulmonary complaint, I believe. It was hardly tuberculous.

A word in regard to the accompanying process-cut. It is made from a photomicrographic negative that I made with extemporized apparatus on board the U. S. S. *Monterey* in 1894 from a glycerine preparation that was beginning to leak at that time, and that has long ago gone the way of all such preparations. Some of stained preparations were pronounced by experts in this particular disorder to be vegetable matter, which is everything I had ever contended for in regard to them, *id est* that they were cladothryces. The photomicrograph was declared likewise not to represent actinomyces because of deficient length and lack of definition of the clubs. There were abundant suggestions of their being phosphates, carbonates, and sulphates, and tyrosin crystals from these authorities also, to whom my old and damaged specimens were shown. But I had satisfied myself by tests that excluded beyond peradventure the possibility of this being true before committing myself to a diagnosis, of the necessity for care in regard to which I was fully aware.

No one can regret more keenly than myself the numerous imperfections in the records of this case, many of which I foresaw and endeavored to obviate, with little success. Finally, I know very little of the strength of the tendency towards recovery in this disorder, and I only recall one case (Fagge's Text-Book Prac. Med. 2d. Ed., p. ) in which it is noted as having been associated with pulmonary tuberculosis.

## ACTINOMYCOSIS IN NORTHERN CHINA.

On March 20, 1895, Dr. R. J. Gordon and Thos. Brander, M.B., removed the left half of the inferior maxilla of a Chinese patient in Newchwang (Yingko), China. From some misapprehension, I was not present at the operation; and I only received the specimen removed several hours after it had been placed in a fruit-can full of water, to which it had imparted a most penetrating odor, suggesting strongly aggravated herring-brine. I

found the teeth that remained displaced upward, and all of the compact bone-tissue spread apart and in places destroyed by a mass of leathery consistence that occupied the central portion of the body of the jaw, to which it was confined. It had extended just to the symphysis menti. The original point of infection was not made out.

Some poor sections that I made of this central neoplasm showed connective tissue surrounding areas of typical actinomycotic growth, which I was able to stain only faintly with the limited means at my disposal. Where breaking down had occurred, I was able to demonstrate the fungus in fresh preparations, which were accepted as conclusive by two of my associates, both of whom were Edinburg graduates in medicine.

The specimen itself was spoiled from drying through the leaking away of the alcohol, in which I was at pains to preserve it, before I was able to secure any well-made sections from it. It never lost its penetrating odor, which spoiled several articles in my baggage, where I was obliged to carry it.

I was told by one of my associates that there were a good many similar cases to the one sketched above operated upon by the surgeons in the medical mission hospitals in Manchuria every year. Several inquiries about its prevalence in horses, and in other animals, were not productive of any definite replies, although I do not consider this to indicate much in one way or in another.

921 Russell St., Nashville, Tenn.

## MAMAGEMENT OF ABORTION.*

BY JAMES B. STEPHENS, M.D., OF NASHVILLE, TENN.

In discussing the subject of abortion, we will accept the usual definition that it is a premature casting off of the product of conception before the end of the fourth month of utero gestation.

*Read meeting of the Middle Tennessee Medical Association held at Columbia, Tenn.

Ordinarily the symptoms of impending abortion are hemorrhage, sooner or later accompanied by pains of an intermittent character. Occasionally these symptons are reversed in their order, pain coming on first and hemorrhage following. I have known the uterus in the first two weeks of pregnancy to expel its contents suddenly, without being preceded by either pain or hemorrhage. Doubtless many cases of so-called menorrhagia occurring when the woman has, perhaps, passed a few days beyond her regular period are really early abortions, the embryo escaping unrecognized, the flow being really a metrorrhagia, lasting unsually long and attended with more or less offensive odor. As hemorrhage and shooting pains are the first symptoms that attract attention in extra-uterine pregnancy, every case of hemorrhage in the early months of pregnancy should be carefully examined with a view of determining whether or not we are dealing with an intra- or extra-uterine pregnancy.

When either pains or hemorrhage exist separately, there is hope of arresting the threatened abortion; should both pain and hemorrhage exist in a moderate degree, unaccompained by uterine displacement or a syphilitic history, there is still hope. But should the four conditions coëxist, all efforts to arrest usually fail; and should a dilated os exist with either pain or hemorrhage abortion usually follows.

The treatment should be governed by the prognosis as to whether or not there is a possibility of arresting the effort of abortion. If circumstances justify the conclusion that arrest is possible, our efforts should be directed towards the arrest of the pain and hemorrhage. The woman should be kept perfectly quiet in the horizontal position, the bowels should be kept in a soluble condition by mild laxatives, the diet should be light and non-stimulating. Opium in some form should be given, either by the mouth, rectum, or hypodermically, in such doses and at such intervals as may be required.

Should a uterine displacement exist, and the organ is movable, it should be carefully replaced, and the patient directed to occupy that position in bed that will favor the retention of the organ in its normal position; in this way pressure is removed, the interference with the functions of surrounding organs is corrected, and an easy and healthy blood circulation is established

and engorgement thereby relieved. I am not sure that I have ever seen any decided benefit result from the use of the preparations of viburnum prunifolium when given alone; but when combined with tincture of opium, the combination acts nicely. Chlorodine, in from 10 to 30 drops, given every few hours is recommended by Playfair, but of all the agents opium is undoubtedly the most reliable. When all efforts have failed, and abortion is inevitable, all anodynes of every kind should be suspended, and efforts should be directed towards aiding the uterus in expelling its contents as speedily as may be consistent with safety; usually nature's efforts are sufficient after anodynes have been withdrawn. But should we not wish to remain with the patient, or should hemorrhage be considerable, a Sim's speculum should be used, and the vagina should be carefully packed with aseptic material, with a view to arresting hemorrhage and at the same time exciting increased expulsive effort.

After a lapse of from eight to twelve hours, the tampon should be removed, and, if the womb has not expelled its contents, should be replaced by another tampon. The cessation of pain is an evideuce that the womb has expelled its contents and indicates that the tampon should be removed, when the embryo, either with or without the secundines will be found resting above the tampon. Should the os be contracted and unyielding, and the woman suffering considerable pain, it should be dilated with Goodell's, or some other available dilator, before tamponing the vagina. We should be careful in using the dilator not to rupture the membranes. This procedure, if carefully done, will certainly hasten the termination of suspense and suffering. If the secundines come away with the embryo, well and good. Often the fœtal envelopes together with the placenta, if pregnancy is sufficiently advanced for one to exist, is left behind, in which event an effort should at once be made to remove them by the finger, the opposite hand being used to press the womb firmly down so that the finger may be able to explore the cavity of the womb and determine the position of the placenta, whether it is detached, partly detached or adherent in its whole circumference. If detached, or partly detached, it can generally be removed by the finger; or if adherent, provided the adhesion is not too firm, removal by the finger may be effected. But should

ACTINOMYCOTIC FUNGUS.

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(ERRATA IN TEXT—Page 539, fifteenth line—of the form of Cladothricecæ.
Twenty-eighth line—Fagge's Text-Book of the Principles and Practice of Medicine, p. 365, 3rd edition, 1891.)

we fail, what next? Just here I am approaching a field on which many a battle has been fought in the last few years, both by pen and tongue.

Very many writers and speakers, in America and elsewhere, of high standing in the profession advise and practice immediate forcible removal, upon the grounds that hemorrhage and subsequent septicemia may be avoided. While many others of large experience and equal eminence, basing their advice on the result of their experience and practice, advise the expectant plan until circumstances demand active interference. Certainly the subject is a very important one. Extremists, in any vocation, are not the safest leaders, and, among medical men, not the safest teachers nor the most successful practitioners.

That venesection is now seldom practiced is no evidence that it is useless in suitable cases, but its abuse by extremists brought it in such disrepute that extremists of the anti-venesection persuasion have carried their views to the opposite extreme. Dr. Benjamin Rush was a great man in his day and time. He was an original thinker, a voluminous writer and a great worker. Medical books were scarce in his day, and he had to write books on medicine in order to have medical books to read. But, after all, he was an extremist in the use of the lancet, and I imagine if he was living to-day, and should happen to take to gynecology, he would want to cut open every woman who had a pain in her belly.

The pendulum is prone to go too far when it passes the perpendicular line. About the only difference between the extremely conservative physician and the radical one is that the former is left at the post and the latter is distanced at the home-stretch. We should always bear in mind what is left behind after the fœtus is passed. We are taught that up to the end of the second month there is no placenta; that about that time the placenta begins to form, and previous to that time the fœtus derives its nourishment through the medium of the chorion which is attached to the uterus by little rootlets, which extend down into the uterine glands; and between two and a half and three months the chorion loses all its tufts except at one point, at which point it becomes exceedingly vascular and increased in thickness, and this thickened portion with the thickened decidua

forms the placenta. It would seem, therefore, that up to about three months there is nothing contained in the gavid uterus but the fœtal ball, consisting of the embryo and its essential membranous investments.

I repeat, that we bear these points in mind, in order to know what is contained in the womb after the escape of the fœtus at the different periods of utero-gestation. I think, however, that these rules are liable to considerable variation, and that we sometimes meet with instances of precocious development of the placenta. I am quite sure that I have met with abortions at two months in which the placenta had formed. Then, we will suppose that utero-gestation has advanced far enough for the placenta to be formed, and we have failed to remove it with the finger, and if hemorrhage is going on I know that the placenta is either wholly or partly detached. If the woman is in good condition, with a normal pulse and temperature, I would not hesitate to thoroughly tampon the vagina with material made aseptic, with a view to the arrest of hemorrhage and exciting the expulsive effort of the womb, expecting to find on removing the tampon, eight or twelve hours later, the placenta resting on the tampon; but if this should not be the case, I would not wait longer, for fear of septic infection, but would proceed at once to remove the secundines by curetting, aided by the use of long-bladed dressing forceps, until I am satisfied that the womb is entirely cleared; and to make sure that this is so, I would withdraw the speculum and explore the cavity of the womb with the finger, and if any fragments are detected, repeat the curetting.

If, however, after the expulsion of the fœtus the placenta is retained and the woman is feverish and her pulse accelerated, and hemorrhage going on, I would not risk the delay incident to the use of the tampon, but would curette at once. If there is no hemorrhage, I infer that the placenta is adherent in its entire circumference, and that so long as this is the case there is no raw surface exposed and the chances for decomposition are small, and, therefore, the chances for septic infection reduced to a minimum; and knowing the difficulty of removing an entirely adherent placenta with the blunt curette and the danger of damaging the womb with a sharp one, I tampon with a view to exciting uterine contraction and to prevent hemorrhage should the

placenta become detached in my absence. On removing the tampon at the expiration of eight or ten hours, and there is still no detachment, I readjust a fresh tampon and repeat the procedure until the desired result is accomplished, unless odor is detected in the discharges from the womb, or hemorrhage indicates that the placenta is partly detached—in either event I would curette at once. In the meantime the decidua serotina has been undergoing more or less fatty degeneration, and the separation of the placenta is therefore made easier than if the curette had been used at the start. Usually when anything is left in the womb the os is very slow in contracting, but occasionally it closes with a portion of the secundines retained in utero which will be manifested by a protracted oozing of blood of a more or less offensive character, In such cases the os should be dilated and the womb carefully curetted. In all cases after curetting, the womb should be carefully and thoroughly irrigated with an antiseptic lotion and then swabbed out with absorbent cotton on an applicator saturated with Churchill's tincture of iodine. I am not partial to packing the womb with iodoform gauze as some are in the habit of doing. It occurs to me that any foreign body in the womb acts as a source of irritation. It is true that the gauze absorbs the discharges, but when the os is pervious, the discharge will take care of itself. There are no doubt cases, the circumstances of which justify the practice, but I think they are rare.

Very nearly all writers advise the use of Sim's speculum in curetting the womb. I much prefer a large bi-valve self-retaining speculum with short blades. My reason for this preference is that the patient being placed on her back with hips slightly elevated and near the edge of the bed or table, the operator is enabled with his left hand or the hand of an assistant to grasp and steady the womb, and press it downwards toward the vulva while he is operating with the right hand. While in using Sim's speculum, the position of the woman, which is made necessary for its use, deprives the operator of these advantages.

In case of abortion occurring before the placenta is formed, and curetting becomes necessary, it should be done with great care and with a blunt curette, as the detachment of the decidua leaves the inner surface of the womb spongy in character, and

resembles, as Dr. Thomas says: "a raw piece of beef," and is therefore much more easily wounded at this period than later on.

I need not say that antiseptic precautions should be strictly observed in all cases of abortion. After the womb is thoroughly empty and irrigated and swabbed out with Churchill's tincture of iodine, the external parts should be thoroughly cleansed with either a bichloride or carbolic acid solution, after which I usually apply a pad, made of a folded napkin, saturated with the tincture of camphor and oiled on the side that goes next to the surface. This is an old-fashioned appliance, it is true, but camphor is a most excellent germicide and is always at hand, and as the infecting germs are said to enter from without, the camphorated pad is both theoretically and practically a good application. It should be renewed about three times a day. I am not in favor of too much use of vaginal injections, except when the character of the discharge indicates them. I think the practice is often carried to excess. When it is necessary to use them, the syringe should be kept clean and the nozzle should be made aseptic before each using, otherwise more harm than benefit may result.

Under the most favorable circumstances, abortion always leaves the woman in a pathological condition—nature's effort at procreation has been interfered with and the process of involution that takes place is perfectly in keeping with nature's laws after parturition at full term—takes place slowly and often very imperfectly after abortion. Consequently, very many women become chronic invalids whose ill-health is traceable to one or more abortions. It is, therefore, more important that careful attention on the part of the physician, and greater prudence on the part of the woman, should be observed after an abortion than after labor at full term.

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NEW ORLEANS POLYCLINIC.—The tenth regular session of the New Orleans Polyclinic will begin on January 11, 1897, to continue for three terms of six weeks each, ending May 15, 1897. Vast facilities for practical post-graduate teaching at the great Charity Hospital, at the Eye, Ear, Nose and Throat Hospital, and at the special clinics in the Polyclinic's new building. For announcement or further information, address New Orleans Polyclinic, P. O. Box 797, New Orleans, La.

# Society Reports.

## NINTH ANNUAL MEETING OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

HELD IN NASHVILLE, TENN., NOV. 10, 11 AND 12, 1896.

The Association was called to order in the neat, little Audiorium of the Nicholson House, on Tuesday morning, at 10 o'clock, by the President, E. S. Lewis, M.D., of New Orleans. About fifty members, and quite a number of Nashville and local physician were present. Rev. J. I. Vance invoked the Divine Blessing on the members and their work.

The first paper read was by W. D. Haggard, Jr., M.D., of Nashville, its title being: "Vaginal *vs.* Abdominal Section for Pus in the Pelvis." He traced the treatment of that condition through the transitional periods of vaginal puncture, laparotomy, vaginal hysterectomy by the French, and hysterectomy by the American school. All of which have been replaced in part by vaginal incision, exploration, and evacuation of pus pockets. The abdominal method affords the best facilities for visual inspection, and safety to viscera; but the great danger was in rupture of pus collections, which may be violent and fatal in twelve hours. Sometimes the pus is innocuous, but death on the critical, third day, is too frequent. Abdominal section is preferable in tuberculosis of the ovaries and tubes, and in small unilateral pus tubes high up, but they are also removed by anterior colpotomy. Opening and draining large pelvic abscesses is an old and safe procedure. The geography of pus in the pelvis makes it extra-peritoneal. There is no risk to the patient. She will submit to it. We can change the method, but we can't change the patient. In patients so ill with sepsis that they cannot stand

much surgery, evacuation and drainage of the pus becomes a life-saving procedure. Should simple pus-letting not effect a cure, subsequent operation could be done with less danger than in the presence of pus. The field of vaginal section is to prevent suppuration in early cases, to anticipate it in puerperal cases, and to save life in desparate pus cases. It is simple, surgical and safe. Its application to inflammatory diseases of women and to pus in the pelvis is one of the greatest surgical triumphs of the age.

The discussion was opened by Dr. Joseph Taber Johnson, of Washington, D. C. In great measure he was opposed to the vaginal route, although, no doubt, in some cases there was very much to be said in its favor. The abdominal method of reaching these lesions was more convenient and applicable in most cases, especially when, as in many cases the pus extended above the brim of the pelvis, and it afforded greater advantages if other morbid conditions that require surgical attention existed; furthermore, he regarded it as more safe. The vaginal method was applicable to cases in which the pus was low down, and uncomplicated, but could never be as complete as in the other. The exploratory incision, suggested by the essayist, he would endorse. Circumstances would in many cases determine the method. That the vaginal route was more dangerous, he cited a great number of of accidents to the ureter, bladder and other viscera reported by some of the best and most skilled operators.

Dr. C. P. Noble, of Philadelphia, agreed with Dr. Johnson. Neither method had all the advantages, but if he was restricted to one would prefer the abdominal. One of the objections urged against opening the abdomen was the liability to ventral hernia. In the last four years he had operated in 397 cases, buried sutures being used, with only seven cases of hernia, one of these had an umbilical hernia prior to the operation. This objection can be rendered insignificant by the use of the buried silkworm-gut suture and care in closing the wound. So far as shock was concerned it was greater by the vaginal method. As diagnosis can not always be perfect, when everything is brought into view by opening the abdomen, we can better determine exactly what is to be done, especially if appendicitis is the cause of the pus, or if it is a complication. He cited the liability of

clamping the ureter, and the formation of vesical or bowel fistula; and that in cases of cancer, the recurrence is excessive in operations per vaginam. Large collections of pus, he admitted, could be satisfactorily treated by vaginal drainage, and in cases of peritonitis early operation by this method had its advantages.

Dr. Howard Kelly, of Baltimore, in a few brief, pointed and forcible remarks stated that in all cases of pus in the pelvis, the woman should always be given the advantages of vaginal drainage. It is not necessary to remove the uterus to get rid of this trouble, evacuation of the pus and thorough drainage can be accomplished without so severe and non-conservative a procedure. He cited cases of opening the vagina, and would urge always to drain first by the vaginal route, then, afterwards if necessary, to open the abdomen.

Dr. Lewis McMurtry, of Louisville, said that the French school of surgeons had never done well in abdominal methods, but were extremely expert in operating through the vaginal route— their dexterity amounting almost to slight of hand. This is not a new, but a revival of an old method.

Dr. J. Wesley Bovee, of Washington, D. C., was in favor of the vaginal method, but is opposed to opening in front of the uterus except in cases when the pus was in front of the uterus. One feature he would call attention to, was that in cases where there were several separate and distinct collections of pus the abdominal method was best suited and enabled the operator to be more complete and effective in his work.

Dr. R. B. Maury, of Memphis, stated that both measures are applicable. Circumstances would determine. Cited cases illustrating the advantages of the two methods.

Dr. W. E. B. Davis, of Birmingham, said that the practice of opening abcesses by the vagina is so old as not to require discussion; but the evacuation and treatment of pus tubes is something of a different nature. As to the argument that you might have hemorrhage in vaginal operations, one should always be prepared to open the abdomen, if necessary to control it, but this is not often the case. The practice of total ablation of the uterus and appendages, resorted to by French surgeons, is not always necessary. The conservatism resulting from the vaginal operation is to be commended.

The President, Dr. E. C. Lewis, of New Orleans, having been requested to state his views, said that as this subject will be considered in his Annual Address he would not discuss it at this time.

Dr. W. D. Haggard, Jr., in closing the discussion, said he felt the importance of the theme had elicited so bountiful and pregnant a discussion rather than his short paper. All were agreed on the propriety of the vaginal operation for huge pelvic abscesses, as a "life-saving procedure." In a case of that type, at the City Hospital, a week before, he felt sure that vaginal incision would have given a chance, whereas complete ablation of uterus, and pus sacs, through the abdomen done rapidly and with safety to the other viscera, destroyed life on the third day from sepsis of rupture and peritoneal contamination. In a case done in a hovel, cited in the paper, after curettage, vaginal section revealed a tense left tube in a girl with gonorrhœa one month, and active symptoms of pain and tenderness only three days. The tube was slit, and a great quantity of serum let out. The right side was clear, but in a week became similarly affected, presented identical symptoms and was treated the same with complete success. He believed those *serous effusions to be the preceding pathological condition to pyosalpinx.* He advocated early vaginal section in these cases. Hernia and shock were not the objections to the abdominal route. It was sepsis. In the lower route that danger is nil.

The next paper was by Dr. A. M. Cartledge, of Louisville, the subject being "Cholelithiasis, with Report of Cases." It was a very able dissertation on gall bladdery surgery, in which had recently been done some most brilliant work, a most fruitful field of surgical advance in which the results had been grand. He gave a very thorough consideration of the diagnosis of biliary conditions. Jaundice and even pain were not necessary features. Physical examination was of most importance. A displaced and fixed right kidney, and homologous or heterologous growths might be misleading. His report of cases was most interesting.

Dr. J. McF. Gaston, in opening the discussion, commended the high order of the paper. He further stated that cholecystenterostomy was only necessary when there was permanent occlusion of the duct from organic changes.

Dr. J. D. S. Davis, of Birmingham, Ala., agreed with Dr. Cartledge, that in no field had there been such success accomplished as in gall bladder surgery. He called attention to the frequency of cases of biliary conditions unaccompanied by jaundice. In regard to the virtues of cholecystotomy, that drainage of the gall bladder and biliary passages would almost always result after opening the duct and removing the concretion. Cholecystotomy should be resorted to first, and then if not successful cholecystenterostomy could be performed.

Dr. Geo. Ben Johnson, of Richmond, Va.: Cholecystenterostomy should be resorted to when the stone is so impacted that it cannot be removed. Had seen the fistulous opening left after the the operation of cholecystotomy closed in ten days, and had seen it remain open for as long as three months, but had never seen a case in which it had not closed satisfactorily. Had operated seven times, all successful.

Dr. W. E. B. Davis: Surgery of the gall bladder had given most excellent results, but not so as to surgery of the duct. Did not think it necessary always to suture the duct when it had been incised.

Dr. G. A. Baxter, of Chattanooga, would emphasize the frequency in which cases would occur unaccompanied by colic or jaundice. Cited cases in which there had been no pain.

Dr. Floyd W. McRae, of Atlanta, reported a case in which a large calculus located in the hepatic duct, with patient intensely jaundiced.

Dr. Cartledge in closing the discussion doubted that any cases primarily required cholecystenterostomy, and would only resort to it when complete and unrelievable obstruction occurred. Had performed cholecystotomy in cases in which the duct was almost completely closed by stenosis from inflammatory products, that had gradually cleared up, bile again appearing in the stools from which it was previously absent. The drainage afforded by opening the gall bladder evidently had an influence i resolving and absorbing previously formed inflammatory products occluding the duct.

On motion the Association adjourned until 2:30 P.M.

### TUESDAY—AFTERNOON SESSION.

The Association was called to order at 2:45 P.M., Dr. Joseph

Taber Johnson in the Chair, the attendance being larger than in the morning.

Dr. J. T. Wilson, of Sherman, Texas, read a very classical and scholarly paper on "Mental Complications Following Surgical Operations." We regret that we have not space to give a full abstract of his very excellent and interesting essay. Heredity, alcohol, drug habits, sex, and other important factors were thoroughly considered.

Dr. E. C. Lewis cited the fact in his own experience of the only too frequent occurrence of mental alienation following immediately after surgical operations, and alluded to its extreme gravity. Reported a case of laparotomy followed by incurable insanity—cases of mental alienation had occurred in lateral branches of patient's family. Another case, ovarian tumor removed in an old lady, followed by delusional insanity. He had also had cases of temporary insanity that passed off after several months or weeks.

Dr. W. E. Parker, of New Orleans had seen several cases with no history of heredity. Had seen cases in men who were the victims of alcohol; in women who were opium or cocaine users. In all operations in such victims advised that the usual amount or a slight increase should be allowed for a while after operations, the removal or cure of the habit to be accomplished at a more appropriate time.

Dr. Cartledge had had a few cases of temporary insanity. Had a group of three cases, all succeeding removal of breast, one in a young woman who had previously suffered from puerperal mania. The etiology should be completely looked into. Most cases not due to heredity were occasioned by some organic lesion or drug habit. These should be closely enquired into in all operations of election. The previous history of the patient should be of great importance, and prognosis provided therefor.

Dr. J. D. S. Davis said that this subject was important from a medico-legal stand-point, and the profession should always be on the lookout for its occurrence, and be able to give a definite statement in regard to it. In one case coming under his observation albuminuria preceded the operation; he further believed that renal troubles had some influence in its development.

Dr. Jos. Taber Johnson (in the chair), Drs. Noble, Kelley

and others briefly mentioned facts in connection with this subject of similar nature—one of the gentlemen mentioned the occurrence of eight recent cases.

Dr. Wilson (closing the discussion) did not think that it was more frequent in women than in men, only that more operations were performed on the generative organs of women than men—these organs, when diseased, being frequently accompanied by insanity. Most cases were neurotics. Had seen a few cases in men—one from simple fracture of the leg. Had suffered a great deal with it, and there was marked evidences of want of nutrition. Melancholia developed in about two weeks after the injury, lasting three months, death resulting from coma. Another was a case of appendicitis—delusions five or six days after operation—attempt at suicide—death a week later. Two cases after perineal operations—one acute mania, the other delusional, both died. The operation in each case had done well—both showed marked evidences of mal-nutrition—death from exhaustion. He thought that ovarian operations were prone to be followed by mental alienation.

Dr. Gaston: Dr. Battey, of Georgia, removed the ovaries to cure insanity.

Dr. Wilson, yes, but it did not always do it. He farther cited a case of fracture of the arm, non-union from suppuration. After three weeks, resected ends of bone, wiring them together, re-applied plaster dressing. The patient, who was greatly opposed to the operation, did well for two days, when acute mania developed, continuing for ten days, when death ensued from coma. There was no history of heredity. In cases of alcohol or drug habit, would continue or even increase the amount per day until after complete recovery from the operation. As to the medico-legal aspect of the subject, the surgeon was no more responsible for mental alienation following an operation than he was for death.

Dr. Geo. Ben Johnson, of Richmond, Va., next read a very excellent paper on "Splitting the Capsule for Nephralgia, with Report of Cases." He stated that disease involving the capsule, pelvis or other fibrous tissues of the kidney was markedly attended by pain, while more extensive disease of the parenchynia was not. Nephralgia was not always associated with other demonstrable

lesions. A too tight capsule, from atrophy of the investing membrane, or hypertrophy of the gland may result in severe and unbearable pain not due to other conditions—this pain would be relieved by splitting or incising the capsule throughout its extent, on the outer surface preferably. His report of a series of cases was exceedingly graphic, as was the simple technique of the operation—cutting down on to the kidney, lifting it out of its bed, and with a small needle exploring it in every direction to ascertain the possibility of calculus, then the splitting of the capsule just as a farmer makes incisions into and through the bark of a fruit tree. The success in the cases cited was marked.

Dr. J. Wesley Bovee.—The term nephralgia is vague, and its use has not been satisfactory. Now here is a condition producing what is generally known as nephralgia, or pain in the kidney, that I do not know to have been previously described, and a method for its relief. Our gratitude is due to Dr. Johnson for giving us a way out of a frequent trouble.

Dr. J. D. S. Davis stated that he had no experience in the method advised, and he said that he thought that when they all went back to their homes that some kidneys would be opened up. He had a case on hand now, that urinalysis and other clinical observation could not determine what was the trouble, and he thought that after having heard the very excellent paper that he would open it.

Dr. Geo. Ben Johnson, in a few brief remarks, thanking the association for the cordial manner in which they had received his paper, with a few brief suggestions of the details of exploring the kidney after it was reached, and the appearances presented after puncture, the projection of the blood from minute openings of a fine needle, and the welling out of the parenchymatous tissue when the kidney was incised, closed the discussion.

Dr. J. Wesley Bovee, of Washington, next read his contribution entitled, "Uretero-Ureteral Anastomosis, with a Case." He alluded to the importance of repairing the ureter, rather than removing the kidney, when the former was injured. The first case of repair of the ureter was reported in 1886. Eleven cases had since been reported including the one he then graphically reported. He described four methods: Rectangular insertion of the upper into the lower portion; the transverse method in which

one end was evenly sutured to the other; the end in end, in which one was inserted to the other; and his method, or the oblique, a transverse section being converted into an oblique, by slicing off a portion of the upper and lower ends, giving a larger surface of contact, and for the application of sutures. Every abdominal surgeon should be familiar with the various modes of repair, as the accident of section of the ureter was sometimes unavoidable. It is no longer good surgery to sacrifice the kidney if the ureter is damaged. The lower part ($\frac{2}{3}$) of the ureter was extremely liable to injury in pelvic operations, and was amenable to repair. Before attempting anastomosis would be certain that the function of the kidney was not destroyed. In some cases of injury low down would prefer vesical anastomosis. The ends of ureters should be explored by bougie when severed. Drs. Kelly and Noble briefly discussed the paper, commending the author's course, the latter reporting a cases in which the ureter was injured, and the discussion was closed by Dr. Bovee, in a few remarks explanatory of details and ureteral anastomosis in general.

"The Treatment of Pregnancy and Labor, Complicated by Fibroid Tumors of the Uterus," was the title of a paper that was next read by Dr. Henry D. Fry, of Washington, D. C. The subject was presented in a very instructive and entertaining manner. The two principal points brought out were: 1. That abortion was not justifiable; and, 2. That hysterectomy or the Cæsarian section should be resorted to in preference, if delivery could not be accomplished otherwise. Fibroid tumors, even in the lower segment of the uterus, and apparently completely occluding the vaginal outlet, sometimes recede, retract, or efface themselves and permit the labor to be completed. Tumors presenting so serious a complication as to prevent delivery of the child should be relieved by hysterectomy or the Porro operation. In some cases, the tumor if low down and pediculated could be removed prior to labor, but operative measures should not be attempted prior to eighth month. The conservative tone of the paper was marked. He cited the case recently reported by Dr. Richard Douglas, of this city, in which he performed hysterectomy successfully on the third day of labor, with exceedingly unfavorable surroundings.

Dr. Coley and Dr. Kime made a few brief remarks of a conservative nature.

Dr. Kelly agreed with Dr. Fry. There was too much tendency to interfere with labor when complicated with fibroids. If the tumor is even low down it could possibly be pushed out of the way. If delivery could not be accomplished then a resort to laparotomy, and removal of child, and uterus if necessary.

Dr. W. D. Haggard, Sr., asked if one trouble to be apprehended in cases of fibroids would not be great liability to post-partum hemorrhage?

Dr. James Goggans made a few remarks of a conservative tenor.

Dr. Gaston reported a case of labor complicated by a dermoid tumor almost occluding the vaginal canal. It was aspirated and a part of its contents, about one quart of grumous fluid removed, and subsequently refilled, and was again emptied and labor was completed.

Dr. Noble advised in such a case, incision and thorough clearing out the cavity.

Dr. Baxter asked Dr. Fry if there was delay in removing fibroids would there not be great liability to post-partum hemorrhage?

Dr. Lewis, in an experience of over thirty-four years, had only seen two cases of fibroids in lower segment of the uterus, and these quite recently. Both cases were delivered satisfactorily, only one even requiring forceps, and there was no post-partum hemorrhage in either case. In one of the cases the fibroid entirely disappeared with the completion of involution. In some cases hysterectomy would be unavoidable.

Dr. Fry, in closing the discussion, said that the danger of post-partum hemorrhage is to be apprehended, and is one of the complications; especially so, if the placenta is attached over the region occupied by the fibroid. However, would utterly discountenance abortion as a means of treatment.

After the announcement by Dr. W. D. Haggard, Sr., that the banquet tendered the Association by the physicians of Nashville, had been arranged for 10 P.M., in the dining hall of the Nicholson House, the Association adjourned until 9:30 A.M., next day.

THE BANQUET

was served in the beautiful dining-room at the Nicholson, which was handsomely decorated. The table was in the form of a large "E", and was well filled with the distinguished visitors, prominent local members of the profession and a few prominent citizens. The floral decorations were neat and attractive. Dr. Trawick invoked the Divine blessing.

Dr. J. T. Crawford, the toast-master, introduced John Bell Keeble, who made the formal address of welcome, and was greeted with enthusiastic cheers. Mr. Keeble was very happy in his remarks, interspersing seriousness with humor, and keeping the attention of everyone to the end. He closed by bidding them welcome in the name of the medical colleges and in the name of the local members of the profession.

Dr. E. S. Lewis, of New Orleans, responded in behalf of the Association in a most pleasant speech.

The following menu was then discussed in detail, being served in the delightful manner characteristic of the Nicholson and Manager Hancock:

Lynn Haven Bays.
Celery.
Consomme Macedoine.
Tomatoes. Spanish Olives.
Broiled Pompano, Anchovy Butter.
Potato Croquettes. Rhine Wine.
Spring Chicken Caute, Maryland.
French Peas.
Frog Legs, in Crumbs, Remoulade.
Asparagus. St. Julian.
Salmi of Blue-Wing Duck, with Mushrooms.
Cauliflower in Cream.
Maraschino Punch.
Mumm's Extra Dry.
Broiled Quail on Toast, Au Cress.
Fresh Shrimp, Mayonnaise.
Dressed Lettuce.
Neapolitan Ice Cream. Fancy Cakes.
Mixed Nuts. Fruits. Layer Raisins.
Pineapple Cheese. Crackers.

Chocolate. Coffee.

Chancellor.

When ample justice had been done the substantials on the table, the following sentiments were proposed by the toast-master and responded to in eloquent words:

"The Future of Surgery," Dr. A. M. Cartledge, of Louisville.

"The Future of Gynecology," Dr. Jos. Taber Johnson, of Washington.

"The Tennessee Centennial Exposition," John J. McCann, of Nashville.

"Our Association," Dr. W. E. B. Davis, of Birmingham.

WEDNESDAY—MORNING SESSION.

The Association was called to order by the President at 9.30, A.M., and Dr. R. R. Kime, of Atlanta, read a brief but very excellent paper on "Uterine Drainage as a Factor in the Prevention of Pelvic Inflammation," exhibiting samples of hard rubber tubes for accomplishing perfectly the desired end. He first stated that 25 per cent. of cases of pelvic inflammation were due to abortion, and 25 per cent. more to gonorrhœa. He said there was two methods of uterine drainage for metritis, endo-metritis and septic or puerperal infection—capillary or gauze drainage and tubular or ideal drainage, Gauze did not drain the uterus, but was an obstruction. He had ten years' experience with hard rubber tubes to accomplish drainage, and it was most satisfactory. He would use the largest sized tubes that the cervix would admit.

Dr. Bovee agreed very nearly entirely with the essayist. He only used gauze drainage after curettement or the operation of trachelorraphy, and let it remain twenty-four hours in order to keep the os and cervix open. If gauze was left in the uterus forty-eight hours, when removed it would be followed by a flow of pus, detritus, etc. Had occasionally used an open tubular drain, but found that it caused pain. Thought that the cervix would remain open if sufficiently divulsed. He usually replaced the womb and packed with gauze anteriorly or posteriorly to maintain position if defective. The tubes exhibited will certainly keep the cervix open, but would they not permit infec-

tion from the vagina, which was extremely difficult to keep sterile.

Dr. Kelly, to some extent, approved the paper, but did not resort to artificial drainage to any great extent. He depended upon thorough divulsion to secure it, and thought it was usually sufficient. He would like to hear from Dr. Haggard, Jr., in regard to the recent practice in New York City and the Woman's Hospital.

Dr. W. D. Haggard, Jr., had never used the particular form of the tube exhibited, but had seen the Outerbridge stem tried, which would certainly keep the cervix open. He also mentioned another form of stem used at the Woman's Hospital—a spiral of metal—similar to the turnings one sees coming from cylindrical bars of iron on the lathe—those were electro-plated with gold. He also mentioned an aluminum tube used by Dr. Wylie. The effects of gauze were bad—it does not drain. He preferred to rely on divulsion, as mentioned by Dr. Kelly.

Dr. C. P. Noble, concurred with the essayist—gauze does not drain but dams back. In the non-puerperal uterus, he depended on the organ draining itself if divulsed. Had never used the tubes exhibited by Dr. Kime—thought that as the uterus could be drained without them they were not needed. They might be a source of danger from infection by the vagina. He had used gauze temporarily in puerperal cases.

Dr. Joseph Taber Johnson emphasized the fact that gauze can not be depended on. The tubes would be good in some cases. He endorsed some of the objections urged against them. Had used tubes of slightly different make, and found them beneficial in dysmenorrhœa and sterility. Did not think the tubes shown were large enough in post-puerperal cases or abortion.

Dr. Goggans said that divulsion accomplished for him all that was necessary.

Dr. Frye said that gauze had its value for hæmostatic purposes, but should always be removed at end of twenty-four hours, and re-introduced, if necessary, after washing out the uterus. If you have a septic condition of the vagnia or uterus, the tubes were objectionable. They would not, in his opinion, be of any service in the septic or puerperal uterus. Concurred in the remarks of Dr. Johnson in regard to their value in dysmenorrhœa and sterility.

Dr. Kime, in closing the discussion, said that he had urged the use of the tubes as a prophylactic measure; that the sizes exhibted were only for the non-puerperal uterus. Other sizes could be used—one just so large as could be readily passed through the internal os.

The following names were reported for membership by Dr. L. S. Murtry, of the Judicial Council, and, by unanimous vote, they were elected:

Drs. C. P. Noble, Philadelphia; J. Munson Handley, Baltimore; Lomax Gwathmey, Norfolk, Va.; J. Howell Way, Waynesboro, N. C.; W. P. Matthews, Richmond, Va.; W. H. Doughty, Augusta, Ga.; W. H. Myers, Fort Wayne, Ind.; W. D. Haggard, Jr., C. R. Atchison, Paul F. Eve, J. R. Buist and C. S. Briggs, Nashville.

"Gun-Shot Wounds of the Abdomen" was the title of the next paper, which was by Dr. W. E. Parker, of New Orleans, La. The paper, he said, was very lengthy, and he would give a brief abstract of it, and briefly report a series of thirteen cases. The paper would be in the hands of the Secretary in time for publication in the Transactions. He stated that the mortality from injuries of the small intestines should not be followed by a mortality of over 70 or 75 per cent. He advocated early operation in all cases, and thorough search for perforations, and urged thorough examination by probing or opening the abdomen, in order to make diagnosis.

Dr. Gaston could not agree with the statement regarding mortality. Ashurst gives the death-rate at 70 to 75 per cent., whether operated upon or not. Laparatomy should be made in all cases if perforation of intestines existed. The escape of fecal matter was diagnostic. He alluded to Senn's hydrogen gas test, having seen a very graphical demonstration of it by Senn, yet he believed the distention of the gas forced into the bowel would be detrimental, and advised a simpler method by irrigating the wound through a double canula, when fecal matter might be washed out. If operation is done at all, it should be done early.

Dr. N. P. Dandridge, of Cincinnati, said that Dr. Parker was to be commended for so earnestly urging operation. He alluded to the necessity of early operation. Stab-wounds were

less likely to penetrate the intestine, and were not so serious as gun-shot wounds, nor so likely to require operation. In cases in which he was in doubt as to the intestine being opened, he would deem it best to open the abdomen carefully to ascertain the extent of injury. Could not agree with Dr. Parker as to the mortality, but his results were commendable.

Dr. Cartledge—The paper will be accepted as the up-to-date treatment, and would congratulate the author of the report on his success—six cases recovering in thirteen consecutive cases, regardless of selection. Shock was an important feature in intestinal gun-shot wounds, some being attended with great degree of shock, and in others it would scarcely be apparent. Internal hæmorrhage, which he regarded as very serious, requiring laparotomy as much so as perforation, was almost always followed by extreme shock; yet cases with quite a number of perforations would in some instances be free from it. These were the cases that walk about, even walk into your office and laughingly tell you that they had been shot. There is quite a difference between surgical shock from extreme pain, a severe wound, etc., and acute anemia; but the two together gave the greatest manifestations of shock.

Dr. A. V. L. Brokaw, of St. Louis, said that Dr. Parker's statistics were unusually good. His own, he regretted to say, had not been so good. Every case of gun-shot wound of the abdomen should be a case unto itself—whatever is to be done should be done quickly. Senn's diagnostic method is too slow and inconvenient for casual work. He advocated earnestly exploratory incision in all cases where there was the slightest apprehension of perforation or internal hæmorrhage.

Dr. W. E. B. Davis commended the excellent results reported by Dr. Parker. Emphasized the importance of early operation. Almost hopeless after thirty-eight to forty hours, although some cases may recover even with so much delay in operating. Hæmorrhage is an important question to be considered, and was a frequent cause of death. Did not approve of Senn's test.

Dr. Rhett had had three cases within the past year—two hopeless. In the other, there were six perforations of intestines, which were filled with fecal matter. He made an incision two inches long in longitudal axis of bowel to remove accumulated

feces; wounds were carefully closed, bowels moved next day. Patient recovered, Thought that it would be safer to move bowels in twenty-four hours, if filled with fecal matter, rather than wait four or five days. The suturing of intestines would be stronger and less liable to give way at the earlier period.

Dr. Hunter, of Alabama, emphasized early operation if at all. Doubtful of favorable results after twelve hours.

J. D. S. Davis questioned the 75 per cent. of recoveries in perforations of small intestines in all cases. The successful cases reported had been operated on within a few hours after receipt of injury. This is the key-note of the subject, although he did not agree with Dr. Hunter, that operations within twelve hours was necessary for favorable results. Mortality would be increased by delay, but some might recover. Might have quite a number of perforations with slight symptoms. Severity of symptoms were not due to shock but to concealed hæmorrhage. Did not like Senn's test, nor the irrigation method proposed by Dr. Gaston.

Dr. F. W. McRae, of Atlanta, concurred in the idea of early operation.

Dr. Howard Kelly offered the following resolution, which was adopted without a dissenting voice:

*Resolved*, by the Southern Surgical and Gynecological Association, that it is the unanimous opinion of the Association that all cases of penetrating gun-shot wounds of the abdomen, giving evidence of intestinal perforation or internal hæmorrhage, early opening of the cavity, under proper procedures, was the correct method of treatment.

Dr. Parker closed the discussion with a few brief remarks elucidating the cases reported, which were not selected cases.

"The Evolution and Perfection of the Aseptic Surgical Technique," was the title of a most admirable, yet brief and pointed paper, read by Dr. Lewis S. McMurtry, of Louisville. He first commenced by taking stock, as it were, of the correct antiseptic and aseptic procedures, and pointed out that occasional cases would result fatally, despite the utmost care and by the best operators. There was a loop-hole somewhere, and the point was to ascertain it and correct it. He reported two cases from two of the most careful operators, who were scrupulous in their every attention and detail, and then demonstrated the fact

the "missing link" was in the want of asepsis in the operator, some of the attendants, or the field of operation. With all our details this was occasionally overlooked.

Dr. Howard Kelly, in discussing the paper, said that antisepsis was the rule before the operation, and asepsis during the operation. We can by antisepsis sterilize instruments, dressings, etc., but for the hands of the operator and attendants, as well as the field of operation, we are limited to asepsis. Here is the loop-hole. Not enough care is taken in looking after the hands. He described methods of making the hands aseptic; not less than thirty minutes before the operation, and all the time possible prior to the operation, should be devoted to this purpose; touch nothing with your hands that has to be left in the abdomen if you can avoid it.

Dr. George B. Johnson stated that there was great danger to the patient from the surgeon and his assistants unless the greatest care was taken. Dressings and instruments can be made sterile by heat, not so the hands.

Dr. Noble, of Philadelphia, said that no subject was so important to the abdominal surgeon. He fully agreed with Dr. McMurtry, and those who had preceded him. Everything possible should be made sterile by heat and steam. Steam and boiling water were not used enough. Another fault was a mistaken economy in regard to dressings and appliances used at an operation. All dressings, sutures, etc., not used at an operation should be thrown away. Saving such things from one operation to another was a dangerous economy. Full care should be taken with the patient and field of operation; this, and the hands of the operator and assistants, was the crucical point. He advised thorough scrubbing with hot water, with suitable brush, of hands for twenty minutes, then alcohol, permanganate of potass and oxalic acid for ten minutes more. Would not see and examine patients on his operating days.

The dinner hour having arrived, the Association adjourned until 3, P.M., when the Address of the President was made the first order of business, next the Memorial Address of Dr. Richard Douglas, then the resumption of the discussion on Dr. McMurtry's paper.

WEDNESDAY—AFTERNOON SESSION.

Association was called to order shortly after 3 o'clock, Dr. J. Taber Johnson in the Chair, when the President, Dr. E. C. Lewis, delivered his annual address, in a courtly, eloquent and dignified manner. In it he combined a grand eulogium on, with an appeal for, conservatism in operations for the relief of pelvic suppuration. He commended the vaginal method of managing such cases in many instances. Uterine fibroids and their removal, both by the abdomen and vagina were ably considered. A method of hysterectomy he described seemed as easy, under his graphic delineation, as taking one of his Louisiana orangos out of its rind. We regret, indeed, that want of space prevents a more full abstract of so excellent a paper, and the jealousy of the Association in limiting the publication of the papers to the Transactions, prevented our resorting to even nefarious means to secure it for these pages. However, we will patiently await its publication in the regular way, when we will endeavor to give more of it to our readers.

Dr. Gaston moved that a vote of thanks be tendered the President for his excellent address; this was carried unanimously by a rising vote of all present.

The next paper was the Memorial Address of Dr. Richard Douglas, of Nashville, on the late Prof. Paul F. Eve, M.D., which was a chaste and beautiful tribute to one whom he classed as one of the South's greatest surgeons, noted for his integrity, his industry and his modesty. While not in the literal sense of the word an originator of either methods or appliances, he so practically put into use, and improved on the appliances and methods of others that he was entitled to even greater meed. He mentioned his remarkable success in lithotomy, and his abilities as a great surgeon, recognized as such at home and abroad, in America and Europe.

The discussion on Dr. McMurtry's paper was next resumed by Dr. George A. Baxter, who objected to the views announced by some of the gentlemen in their remarks during the morning's session, that the general surgeon should not attempt abdominal work. He could see no reason why the general surgeon could not make his hands as aseptic as the gynecologist—he had the same means and it only needed a like application. Is it not a

fact, said he, that the gynecologist, in dealing with the vaginal canal, cases of pus collections, and sepsis, comes more in contact with the vilest specific germs than the general surgeon? The general surgeon should be, and he believed was, more careful of the introduction of germs into the abdomen than the gynecologist. He concluded with a very witty poetical effusion that brought down the house, with both laughter and applause.

Dr. W. D. Haggard, Jr., was extremely gratified at the suggestions of Drs. McMurtry, Kelly, and others. He mentioned the sterilization of catgut by Cumol; also, R. T. Morris' method of using 2 per cent. solution of formaline. He cited one case of tetanus developing in the service of Dr. Hanks, that he thought was due to infection by catgut. He commended mechanical cleanliness, together with use of permanganate of potas. and oxalic acid.

Dr. Floyd W. McRae believed that the general surgeon could be just as clean and aseptic as the gynecologist. The latter handle daily the worst variety of subjects. One general surgeon in Atlanta had been the most successful in cases of appendicitis and gall-bladder work.

Dr. J. A. Goggans, of Alexander City, Ala., commended the paper and the remarks brought out in the discussion; he thought, however, that some were extreme in the length of time devoted to making the hands aseptic. Did not believe that the general surgeon could not in every case render himself aseptic.

Dr. McMurtry, in closing the discussion, said that his paper in substance and title did not say anything in regard to abridging the rights and privileges of the general surgeon. It was only a plea for perfect asepsis, and called attention to certain apparently minor points, on which in some instances hinged the life of the patient, as well as the success and reputation of the operator.

Dr. G. A. Baxter, of Chattanooga, exhibited, applied and described "A New Splint for Fractures of the Humerus." It combined a crutch-shaped splint, connected with a breast shield and shoulder cap, made of tin or other metal, by which the arm could be more securely held in place, and the immobility of the fragments of bone secured, and extension and counter-extension maintained,

Dr. J. McF. Gaston mentioned that a crutch-shaped splint had been exhibited at the Georgia Medical Association, six or seven years ago, and that *Hamilton's Surgery*, edition of 1860, also mentioned the use of a crutch-shaped splint with screw and ratchet for extension. The breast-shield of Dr. B's. splint gave greater security.

Dr. Parker commended the splint for lightness and efficacy.

Dr. J. D. S. Davis.—A very admirable splint, and one that can be readily used by the inexperienced surgeon. He preferred the plaster-of-Paris dressing, and said there was no use for any other apparatus where the surgeon was skilled and adept in its use.

Dr. A. V. L. Brokaw commended the splint. Much of the bad surgery of to day in fractures was due to plaster-of-Paris; it obscured the limb too much.

Dr. F. W. McRae never uses plaster-of-Paris without dread. He thanked Dr. Baxter for the appliance.

Dr. Baxter, in closing the discussion, said that he used plaster-of-Paris very extensively, but you could not depend on it for fractures of the arm, for extension. It would crumble in the axilla and over the shoulder.

"The Relation of the Tubercular Diathesis to its Local Manifestation" was the title of the next paper read by Dr. J. McFadden Gaston, of Atlanta, in which the subject was considered very elaborately and conclusively, both as regards operative measures for its relief and its possible occurrence, especially in the lymphatics. The increase of tuberculosis in the colored race was commented on.

Dr. A. M. Cartledge said that it was a large and interesting subject which had been handled in an instructive and interesting manner. In regard to operative treatment of tubercular disease, it was more difficult to eradicate than malignant disease. Operations for tubercular peritonitis, especially with serous effusion, was attended by most happy results. In regard to the increase of tuberculosis in the colored race, thought that it was becoming more common throughout the world, regardless of race.

Dr. Rhett.—Tuberculosis in the negro largely attracted attention in Atlanta, and from the beneficial results obtained by use of potas. iodide, thought that possibly syphilis might be a

factor. Dr. Taylor, of Atlanta, had treated a large number of cases in the negro successfully by antisyphilitic measures. Bad hygiene and defective nutrition were important elements in the negro.

Dr. McRae.—For thirteen years had been seeing a great many cases in the colored race, many of which were treated satisfactorily by surgical procedures. Fifty per cent. of the cases coming to the Atlanta clinics were negroes. There was not much to be derived from medicine in local tuberculosis. Good diet, exercise in the open air, sunshine, and general improved hygiene did good.

Dr. J. A. Goggans had seen quite a number of cases of local tuberculosis. Operated on a case of tubercular peritonitis last May. Made open incision, let out fluid, washed out and drained; patient up and going about apparently well.

Dr. Gaston, in a few brief remarks, recapitulating the salient points of his paper, and thanking the gentlemen for the discussion closed.

The Association adjourned until 8:30 P.M.

### WEDNESDAY—NIGHT SESSION.

The Association met at 8:45 P.M., Dr. Lewis in the Chair.

Dr. A. V. L. Brokaw, of St. Louis, read an essay on the "Rational Treatment of Diseased Appendix by Operation." In this he took strong grounds in favor of operation, it being purely a surgical affection that could only get perfectly well with certainty by surgical procedure. The danger and great mortality were due to long deferring operation, with the expectation that nature or medicinal remedies would afford relief. Granted that this was so in some cases, yet by the expectant method a too great mortality was due.

The discussion on this paper was deferred until after the reading of the next paper, which was by Dr. J. A. Goggans, of Alexander City, Ala., and was a "Report of cases of Appendicitis." In his remarks he said that much depended on a perfect and correct diagnosis of the exact condition as to whether medical or surgical treatment should be resorted to. It is a surgical condition, and he would operate on every case, where the diagnosis was definite, unless death was pending. First move the

bowels well with mercury and soda, followed by salines; then if the symptoms persisted, would operate.

Dr. Joseph Taber Johnson agrees with the essayists that it is a surgical disease, and that the surgeon should be called in early, even to make a diagnosis. Medical treatment should largely consist in putting the patient to bed and keeping him quiet until recovery or operation. Bowels should be evacuated thoroughly to unload impacted feces and remove germs or other septic material. The use of opium was enticing but harmful—masking the case and confusing to diagnosis. Evacuating by salines would bring about as much relief from pain as was compatible with patient's safety. In the great majority, the appendix should be removed as soon as diagnosis is made. The operation in itself does no harm, and is but slightly dangerous. The earlier the operation, the safer. Before pus forms it is not dangerous, after this it becomes highly dangerous, until it is walled off by adhesions, when it is simply opening an abscess. The operation should be complete. In the relapsing cases the operation has been remarkably successful. Dr. Hunter McGuire had only one death in eighteen cases. The operation should be done after the subsidence of the attack—between the attacks.

Dr. Gaston asked the essayists if they had found foreign bodies in the appendix.

Dr. Goggans.—No strictly foreign bodies.

Dr. Brokaw had only observed fecal masses, enteroliths, inspissated mucus.

Dr. Gaston, in one case, had found a bean, readily demonstrable; in another, a grape seed. Cases do recover without operation; cases all along the line in which we should watch and wait, but it should be done systematically. There would be difficulty in making diagnosis in females by reason of acute morbid conditions of right ovary. The great trouble was in making a correct diagnosis of the exact status of the case. Would always operate if he could determine that perforation had occurred. When the pus is walled off there is no necessity for searching for and removing the appendix—simple incision, evacuation of the pus and drainage.

Dr. F. W. McRae agreed in the main with the essayists. But every case is not always surgical, yet it may become so. Mor-

tality of cases operated on during exacerbation of attack 17 to 18 per cent. Between the attacks, 1 7-10 per cent. In chronic relapsing cases would advise operation.

Dr. Howard Kelly.—In well defined cases would operate. In repeated attacks—growling cases, would wait for the interval between attacks. Recognized the difficulty of diagnosis from ovaritis, etc.

Dr. Noble, on being called on as having had more personal experience than any one present, having undergone the operation, said that he agreed with the writers of the papers. In frank, well-marked cases would operate as early as possible.

Dr. Baxter was in favor of early operation.

Dr. M. C. McGannon, of Nashville, did not believe that any cases of appendicitis were cured by medical treatment.

Dr. Coley, of Alabama.—Cases should be operated on as early as possible. If he had appendicitis himself, he would want his friends to catch him, throw him down, and cut him, if he did not have sense enough to request the operation. His positive statement occasioned quite a degree of amusement to those present.

The Association adjourned until the next morning at 9:30 o'clock, after the announcement of a committee, consisting of Drs. Joseph Taber Johnson, W. E. Parker and J. T. Wilson, to audit the accounts of the Secretary and Treasurer.

### THURSDAY—MORNING SESSION.

The Association was called to order by the President at 9:30 A.M. The first paper was by Dr. H. M. Hunter, of Union Springs, Ala., it being a report of a case of Compound Comminuted Fracture of the Radius and Ulna, near Wrist Joint, in which the recovery was complete, with perfect use of the arm, both as regards pronation and supination. It was treated by a splint of plastic material moulded to the arm.

Dr. N. C. Dandridge said the result was admirable. Those cases were usually followed by impaired use of the arm—union of fragments of ulna and radius interfering with pronation and supination. The splint should be broad, so as not to compress the arm laterally.

Dr. Gaston said that the result was very satisfactory. It was a difficult result to secure in multiple fractures of the arm.

Dr. J. D. S. Davis preferred plaster-of-Paris. The dressing should not be too thick and heavy, and should be moulded down into the interosseous space by continued manipulation until plaster hardened. Would cut the plaster as soon as it hardened—also the bandage immediately in contact with the arm.

Dr. Rhett would use ordinary splint, observing the precaution suggested by Dr. Dandridge of having the splint so broad as not to compress the arm laterally—would also use interosseous pad.

Dr. Saunders, of Ft. Worth, Texas, said that plaster-of-Paris was an admirable dressing for those who were adept in its use. Others had better rely on apparatus of other kinds. One point in the use of plaster was, as Dr. Davis had said, to cut both the plaster and bandage beneath it to prevent constriction of the limb.

Dr. Ford complimented Dr. Hunter on his result. There was great liability to anchylosis in such cases. In using plaster, cut it on both sides of the arm, forming two movable moulded splints. He placed a round stick on the outside of the plaster over interosseous space and bound it firmly down until plaster hardened.

Dr. Baxter liked plaster-of-Paris. The great fault in its use was too much plaster—only so much as would be retained in the meshes of the bandage needed—make it as light as possible. He preferred silicate of soda as being lighter, cleaner, and more elastic—its only objection being its slowness of hardening. He thought the old antero-posterior splint the best application for fractures of the forearm. One fault in treatment at lower extremity of the forearm was want of complete and thorough adjustment of fragments.

The discussion was closed by Dr. Hunter in a few brief remarks.

The Chairman of the Council, Dr. W. D. Haggard, Sr., made the following report:

Next place of meeting.—St. Louis, Mo.

Chairman of Committee of Arrangements.—Dr. H. H. Mudd, of St. Louis, Mo.

President.—Dr. Geo. Ben Johnson, of Richmond, Va.

Vice-Presidents.—Dr. F. W. McRae, of Atlanta, Ga., and Dr. W. E. Parker, of New Orleans, La.

To fill vacancy in Council by expiration of term of Dr. H. McGuire.—Dr. E. C. Lewis, of New Orleans, La.

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*JULIUS UFFELMANN, M. D.*

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**Dr. J. F. Taylor, Richmond, Ind., writes:—**

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**W. E. Kiely, M. D., Prof. Principles and Practice Medicine, Women's Medical College, Cincinnati, O., writes:—**

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The Secretary and Treasurer hold over.

The report was unanimously adopted.

Dr. Wyatt Heflin, of Birmingham, Ala., and Dr. F. E. Shumpert, of Shrevesport, La., were elected to membership.

Dr. Johnson, the newly elected President, was conducted to the Chair, and after being introduced, he said the honor was an unexpected but a most agreeable surprise. He considered this the highest honor that could have been conferred upon him by his professional brethren. He thanked the association.

Dr. A. V. L. Brokaw thanked the Association for selecting St. Louis as the next place of meeting, and promised them a most hearty welcome.

The Auditing Committee reported that the accounts referred to them were correct. Adopted.

Dr. N. P. Dandridge, of Cincinnati, reported a case of Transperitoneal Ligature of the External Iliac Artery for Inguinal Aneurism, with removal of the Aneurismal Sac, which was listened to with much interest.

Dr. W. E. B. Davis also reported briefly, abstract of a case of Ligation of the Common Iliac Artery for Aneurism of the External Iliac, this paper being lengthy would be referred to Committee of Publication.

Dr. Gaston desired to know why Dr. Dandridge removed the aneurismal sac.

Dr. Parker also made a few remarks in regard to the subject.

Dr. J. D. S. Davis advised temporary compression of the main artery of the limb above the aneurism, prior to ligation, in order to develop collateral circulation.

Dr. Cartledge thought that removal of sac in femoral region liable to be attended with danger from injury of vein, etc.

Dr. Brokaw favored the removal of the sac.

Dr. Ford agreed with him and Dr. Dandridge.

Dr. Dandridge, in closing the discussion, said that the blood was extravasated largely into the tissues above the aneurism, and that he was of the opinion that it would be better to incise and turn it all out. Also the removal of the sac permitted the securing of the efferent vessels on the distal side of the aneurism, or opening into it, and the cure would be more complete.

The Association then adjourned to take the cars for Belle

Meade. Through the courtesy of President John W. Thomas, of the N. C. & St. L. R. R., a special train had been placed at the service of the Association, and a most enjoyable afternoon was passed, for in addition to the well-known attractions there was added on this occasion a barbecue, of the old-time Southern kind. They also visited the Centennial grounds, and many were the expressions of appreciation and prediction of an overwhelming success for this enterprise.

The magnificent thoroughbreds at Belle Meade were universally admired, and a brief glimpse of a part of the herd of deer was afforded the well-pleased party.

Through the courtesy of the Wm. Gerst Brewing Company, of this city, an unlimited supply of "Pilsner" was on hand to relieve all who were thirsty.

With the banquet at the Nicholson House, the receptions of Drs. Haggard, Douglas, Maddin, and others, and the outing and barbecue at Belle Meade, it is safe to say that this meeting will long be held in pleasant memory for the "Highland welcome" accorded the visitors to the City of Rocks.

The work of the Association was of a high order of merit, and while there was not a multiplicity of papers read, those that were read were of a most excellent character, and the discussions, of which we have given but a brief abstract, will compare most favorably with those of any scientific organization of the age.

# Selections.

ALCOHOL IN CANCER.—Hasse, of Nordenhausen, has used injections of alcohol for more than twenty years in the treatment of inoperable cancer, and four cases of this kind in his practice are now cured. He uses the same method in cancer of the breast, and believes that cure could be effected in these cases by surrounding the breast with cicatricial tissue by means of alcohol injections. It is preferable, however, to extirpate the breast and treat recurrences by the injections. In this manner he obtained radical cure in a case declared inoperable by Volkmann.—*Semaine Medicale, June* 6, 1896.

A VALUABLE TRIO —Dr. Charles Henry Brown, editor *Journal of Mental and Nervous Diseases*, says: "We like combinations, and, if diligently sought for, reinforcements of valuable remedies by simply bringing them together is next to marvelous. No one will possibly disagree upon the practical and happy relationship, for the relief of many reflex disorders from nervous or fermentative dyspepsia, of sodium bromid, powdered charcoal, and Taka-Diastase. A little dose of the bromid, a good, fair dose of the charcoal, and Taka-Diastase in moderate quantity, viz:

| | | |
|---|---|---|
| R | Sodium bromid | 4 ʒ |
| | Wood-charcoal | 2 ʒ |
| | Taka-Diastase | 90 grs |
| | Syrup ginger | 1 ʒ |
| | Water to make | 4 ʒ s |

Dose, a teaspoonful (1 drachm), well diluted, before eating. —*Medical Age.*

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HYDRASTIS CANADENSIS FOR NIGHT SWEATS.—Hydrastis canadensis, the *National Medical Review* says, is being used with excellent results for controlling night sweats. If a single dose of twenty or thirty drops of the fluid extract does not suffice, then give twenty-five to thirty drops two or three times daily. In nearly every case the night sweats will be overcome. One writer reports seventy out of seventy-three cases of night sweats in tuberculosis where the remedy afforded certain relief.

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DIET IN BRIGHT'S DISEASE.—Dr. Elliot (North American Practitioner, June, 1896, p. 248) says: "It is agreed that the most rational diet is a mixed one. The estimate commonly given is that meat should constitute one-fourth and vegetable food three-fourths. This is often overstepped, and the proportion brought to two to four. Such indulgence throws into the circulation a large amount of nitrogenous waste, which it is the office of the kidneys to remove from the system. An increased amount of organic excretives, continually demanding removal, throws a considerable tax upon these organs, which is frequently rendered more severe by a hyperacid concentrated condition of the urine, as these subjects seldom drink an adequate amount of water.

This irritation, if long continued, eventually leads to functional and, finally, organic impairment of the kidneys. To these sources of irritation must be added the deleterious effects upon the renal structure of the excretion of the by-products of faulty gastric and intestinal digestion, frequently present from the dyspepsia so common among those who overindulge at table."

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# Editorial.

## THE CLOSE OF ANOTHER VOLUME.

In concluding our editorial labors with the last number of the year, it is with a sense of gratification indeed, that for eighteen consecutive years we have been enabled to see the steady progress of our humble journalistic venture. While it has passed through seasons varying markedly indeed, there has perhaps no twelve months of its existence during which the cry of "hard times" was a more universal and just complaint than the past. To natural circumstances existing has been added the turmoil, the confusion, the hurly-burly and general unsettled and unsatisfactory disturbance of a presidential election. Notwithstanding the most adverse year in a general business way in the history of this journal, it is with a feeling of more than pride, that we can say for it, that it has been the most satisfactory year of all that it has experienced in its past history.

We have been enabled to get out a larger amount of good, practical reading matter each month, using better paper, and a better make-up generally than ever before, and we can compare Volume XVIII, most favorably with any of its predecessors. We have been enabled to do this, through the loyal support of its many friends throughout the land, to all of whom, subscribers, contributors, and advertising patrons our most sincere acknowledgements are due.

Some few of our friends have been with us from its initial number, some of whom we have never had the pleasure of meeting face to face, yet with whom we can feel an acquaintanceship that seems as much personal as is possible, and which is solely due to the regularity with which

their *annual* letters of renewal of their subscriptions have come around. Some of them, at times, limiting themselves to a brief statement of the enclosure and its purpose, at other times, adding a few words of acknowledgement and encouragement—these, indeed, have been most highly appreciated. And now as we are bringing to a windup our editorial efforts for 1896, we take great pleasure indeed in sincerely thanking our many friends and readers for their constant, steady support, and to assure them that as each year but adds to our indebtedness to them, it also is a material stimulus to more and more earnest and energetic efforts in the future to urge us on to the utmost of our ability to give them the best medical journal possible.

With the smoothing out and calming down of the political storm of '96, we can redouble our efforts, humble though they be, to advance and uphold the standard of honorable medicine. And while the brief period of existence of this JOURNAL has witnessed much of improvement and progress in the art and science to which it is devoted—in some instances an almost complete revolution and redevelopment of ideas and theories that were once held valid by the ablest of their day, some of the most important problems in medical pathology having been solved, and much that was formerly a part of the absurdities of mythical lore and tradition having given place to established facts, the near future seems far more promising than any periods that have gone before.

The standard text-books of the colleges when this periodical was in its infancy are now almost obsolete—its pages, for the short space of scarce two decades, have shown these steps of gradual advance as they have taken place year by year; and the coming years are far more promising than ever of still greater strides to a more perfect science and art. Medicine is not, nor may ever be, an exact science and art, but the rapid strides of the recent past, if only continued as the future almost positively indicates, will add greatly indeed to an approach to that perfection that should ever be our aim and ideal.

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## OBITUARY.

Dr. Wm. B. Brooks, editor of the *Texas Courier-Record of Medicine*, died at his residence in Dallas, Texas, recently of pneumonia. He was born in Charleston, West Va., in 1843, and went to Texas in 1860. In 1863 he entered the Confederate States Army, and assisted in the defense of Galveston, having been complimented by his division commander for his services as a soldier. He graduated in medicine from the Missouri Medical College of St. Louis in 1875, and in 1882 took a post-graduate course in New Orleans. He was twice married, in 1869 to Miss Emma P. Reed, who died in 1880, leaving three children, two sons and a daughter, who are still living. He was again married to Miss Fannie L. Wilson, of Ft. Worth, in 1884, who, with her two daughters, survive him.

Shortly after moving to Ft. Worth, nearly fifteen years ago, he, in

connection with Dr. F. E. Daniel, established the *Courier-Record of Medicine*, at that time the only medical journal in the State. Dr. Daniel subsequently withdrew, establishing the *Texas Medical Journal* in Austin, and later Dr. Brooks moved the *Courier-Record* to Dallas, which he edited up to the time of his death. *The Courier-Record* will continue to be published by Mrs. Brooks and the two sons of Dr. Brooks, both of whom have been connected with its publication for some years past, and we sincerely hope that the cordial support heretofore granted so deserving a publication will continue to be accorded it.

Dr. Brooks, as medical editor and practitioner of medicine, was held in high esteem by his associates, and to his relatives and friends we tender our sincere sympathies. Loyal to his friends, attentive to his patients, a loving and devoted husband, a fond, affectionate parent, his heart so filled with the impulses of a broad Christian charity—"after life's fitful fever, he sleeps well."

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PAIN AND REST IN DIPHTHERIA.—Rest is one of the sweetest words in our language, and in the management of no disease is this more true, than in diphtheria. In keeping with the experience of Prof. T. E. Murrell, Ex-Vice-President of the American Medical Association, and Dr. Pollack, of St. Louis, who have found antikamnia valuable as a reliever of the pain of nocturnal earache, it has also been found of great value as a sleep producer in these cases. Given in doses of two and a half to five grains every two to four hours, there is no depression nor have other than satisfactory results obtained. Dr. Eggers, of Horton Place, St. Louis, reports in the treatment of an attack of diphtheria in a member of his own family, that, to obtund the pain consequent upon the the injection of antitoxine-serum, which ordinarily lasts from three to four hours, he ex-

hibited antikamnia internally, securing relief in a few minutes. In the treatment of any neuroses of the larynx, coughs, bronchial affections, la grippe and its sequelæ, as well as chronic neuroses, clinical reports verify the value of codiene in combination with antikamnia, the therapeutical value of both being enhanced by combination.

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FAILURE OWING TO SUBSTITUTION.—I have read and watched what has been said of Sanmetto, and often wondered why I did not get any results from it in my practice. When I received my September Medical Briof, and again reading of the grand results advertised therein by the Od Chemical Chemical Co., I went over the ground to try to find out the trouble. To my surprise I found that all my patients had been furnished and were taking palmetto where Sanmetto had been ordered. I intend to watch this matter more closely. P. J. GERLACH, M.D.

Spokane, Wash.

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MAILED FREE TO PHYSICIANS: A Reprint of how I treat respiratory diseases with antiseptics, viz: Catarrh, La Grippe, Asthma, Throat, Bronchial and Lung Diseases. The medicines can be carried to parts affected. Over 800 patients treated and ninety per cent. succeesful. Address, R. C. COTTINGHAM, M.D., 513 Reade St, Moberly, Mo.

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FOOD IN INFANCY.—Looking at the analyses of milk, it would seem that a small addition of water to cow's milk brings it down to human milk, while some contend for a small addition to sugar. Nor need necessarily the sugar be cane sugar; a little maltose sugar is easily procurable, as in Mellin's Food, for instance. The advantage of maltose sugar, in whatever form, to the milk is, that maltose sugar rather undergoes lactic acid fermentation, while cane sugar undergoes acetous fermentation—and acetic acid is far more irritant than lactic acid, whether free or in combination with a base.—*J. Milner Fothergill, M.D., in Manual of Dietcctics.*

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SANDER & SONS' Eucalyptol Extract (Eucalyptol).—Apply to Dr. Sander, Belle Plaine, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, N. Y., sole agents.

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THE SOUTHERN PRACTITIONER is the best advertising medium in the South and West.

# Reviews and Book Notices.

THE MEDICAL NEWS VISITING LIST FOR 1897. Weekly (dated, for 30 patients); Monthly (undated, for 120 patients per month); Perpetual (undated, for 30 patients weekly per year); and Perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient Perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal Grain Leather, $1.25. Philadelphia and New York. LEA BROTHERS & Co.

The Medical News Visiting List for 1897 has been thoroughly revised and brought up to date in every respect. The text portion (32 pages) contains the most useful data for the physician and surgeon, including an alphabetical table of diseases, with the most approved remedies, and a table of doses. It also contains sections on examinations of urine, artificial respiration, incompatibles, poisons and antidotes, diagnostic table of eruptive fevers, and the ligation of arteries. The classified table of blanks (160 pages) are arranged to hold records of all kinds of professional work, with memoranda and accounts. The selection of material in the text portion and the arrangement of the record blanks are the result of twelve years of experience and special study. When desired, a special ready reference thumb-letter index is furnished, which is peculiar to this visiting list, at a small cost of 25 cents. In its several styles The Medical News Visiting List adapts itself to any system of keeping professional accounts.

THE MEDICAL RECORD VISITING LIST OR PHYSICIAN'S DIARY FOR 1897. New and Revised Edition, for 30 patients weekly per year. Handsome Red Turkey Leather, Gilt edges, with Pencil. WM. WOOD & Co., Publishers, New York. Price, $1.25.

This edition of The Medical Record Visiting List, one of the handsomest of the family of annuals, has been revised to increase the amount of matter calculated to be useful in emergencies, and eliminate such as might be better referred to the physician's brary. One of the most important changes is in the list of remedies and their maximum doses in both apothecaries' and

decimal systems, and the indication of such as are officinal in the United States.

In additional to the calendar, visiting list with special memoranda, consultation, and obstetrical engagements, record of obstetrical practice, vaccinations, deaths, addresses of nurses, patients and others, tables for estimating pregnancy, equivalent approximations of temperature, weight, capacity, measure, etc., maximum adult doses by mouth in the decimal and apothecaries' measures, it contains much other useful data for immeditate reference.

THE PHYSICIAN'S VISITING LIST FOR 1897. (Forty-Sixth Year of its Publication.) LINDSAY & BLAKISTON'S. Black leather, gilt edges, with pencil. P. BLAKISTON, SON & Co., Publishers, 1012 Walnut St., Philadelphia. Sold by all booksellers and druggists, and sent by mail on receipt of price, postage paid.

This excellent old friend that we have been using for over two decades, comes to us again with the regularity of time, and notwithstanding that we hardly believed improvements to be possible, we find each year that it is made more and more adaptable to the real wants of the busy phyiscian. One of the improvements to be noticed this year is the leather cover. It contains the usual amount of condensed information that the busy physician frequently needs, arranged in a most practical and satisfactory manner. While there are annually visiting lists and visiting lists, we regard this one to be THE visiting list of all, and its sales have been steadily increasing year by year, the past year showing an increase of more than 10 per cent. over the preceding one.

The following are the prices for the different styles:

For 25 patients, per day or week, $1.00. For 30 patients, in one volume, $1.25. For 50 or 75 patients, in two volumes, January and July, $2.00. For 100 patients, in two volumes, $2.25. The perpetual, containing same as regular edition, but without dates, can be commenced at any time and used until full, bound in handsome red leather, for 1300 names, $1.25. For 2000 patients, $1.50. Monthly edition, name of patient to be written but once during the month, the whole month's account being kept in one place, 75 cents and $1.00.

ESSENTIALS OF PHYSICAL DIAGNOSIS OF THE THROAX. By ARTHUR M. CORWIN, A.M., M.D., Demonstrator of Physical Diagnosis in Rush Medical College; Attending Physician to the Central Free Dispensary, of Chicago; 8 vo., pp. 200. Second Edition, Revised and Enlarged. Price, $1.25 net. W. B. SAUNDERS, Publisher, 925 Walnut Street, Philadelphia. 1896.

This is a clear, concise and practical little brochure, admirably adapted to perfecting the student in physical diagnosis of thoracic diseases, and presents in a systematic form the gist of of the science of to-day in physical diagnosis of this important region, and the author has succeeded most admirably in presenting the essential details of the subject in an entertaining and instructive manner.

FEEDING IN EARLY INFANCY. By ARTHUR V. MEIGS, M.D. 8vo. paper pp. 15. Price, 25 cents. W. B. SAUNDERS, Publisher, 925 Walnut Street, Philadelphia. 1896.

This little monograph is a short, practical essay read at the meeting of the Philadelphia County Medical Society in April last. The author speaks very highly of a formula which he gives, and has been using with great satisfaction for the past fourteen years.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS, by ROBERTS BARTHOLOW, M.A., M.D., LL.D., Professor Emeritus of Materia Medica, General Therapeutics and Hygiene in Jefferson Medical College; Fellow of the College of Physicians; Member of the American Philosophical Society; Honorary Fellow of the Royal Medical Society, of Edinburgh; Honorary Member of the Societe Medico-pratique de Paris, and of various County, State, and National Medical Societies; Author of a treatise on Practical Medicine; of a treatise on Medical Electricity; of a Manual of Hypodermatic Medication; of the Russell and Jewett Prize Essays; and Prize Essays of the American Medical Association, and the R. I. Medical Society, etc., etc. 8 vo. cloth, pp. 866, price $5.00. Ninth edition, revised and enlarged. D. APPELTON & Co., Publishers, New York. 1896.

For twenty years past Bartholow's Materia Medica and Therapeutics has been the standard work and recognized authority by medical students, medical teachers and practicing physicians of the United States. It has steadily grown in favor, and probably as much as any other of this able author's works, if not more, has made his name a household word throughout the land.

In this handsome ninth edition we find the work enlarged by forty-five pages. Additions and alterations have been made at all points to dispose of the new material which the rapid development of pharmacology has contributed to the science and art of therapeutics. So well known is this work in its previous editions, it scarcely requires farther commendation at our hands. It has justly attained that degree of prominence to entitle it to be numbered with the standard medical classics of the day.

WOOD'S MEDICAL HAND ATLASES.—Anatomical Atlas of Obstetric Diagnosis and Treatment.—By OSCAR SCHAEFFER, M.D. Contains 145 illustrations, 8 vo., cloth, pp. 234. Price, $3.00. WM. WOOD & COMPANY, 43, 45 and 47 East 10th St., New York, Publishers. 1896.

As in the preceding three volumes of this series, the plates are simply magnificent, and their scientific faithfulness to nature is remarkable. This volume deals with the morphology of the female pelvic organs, as the anatomical basis of the physiological and pathological phenomena of pregnancy and labor.

The development and pathology of the ovum have been sketched but briefly, and only so far as they are of actual clinical interest with reference to pregnancy and labor.

The general observations on Obstetric Therapeutics, both surgical and medical, are exceedingly valuable.

MEDICAL JURISPRUDENCE, FORENSIC MEDICINE AND TOXICOLOGY. By R. A. WITTHAUS, A.M., M.D., and TRACY C. BECKER, A.B., LL.B., and a staff of collaborators. In four royal octavo volumes. Volume IV., Toxicology. New York: WILLIAM WOOD & COMPANY. 1896.

The fourth volume of this excellent work is devoted entirely to Toxicology and the action and detection of Drugs and Poisons. The volume is the unaided work of Dr. Witthaus, and the experience of a lifetime in this, his particular field of research, is herein embodied. For breadth of scope, carefulness and wealth of detail, and depth of erudition, the present treatise is without a rival, while the author's exceptional opportunities in this line of work have left their impress in the thoroughly practical method adopted.

The volume opens with an Introductory, both Historical and Bibliographical. The other subjects considered are first General Toxicology, Special Toxicology as the Corrosives and Mineral

Acids, Mineral Poisons, Vegetable Poisons, Animal Poisons and Synthetic Poisons. The entire four volumes, now complete, make this one of the most complete and thorough works on Medical Jurisprudence and Toxicology extant. It is from an entirely American standpoint, and the collaborators and associates of Dr. Witthaus and Mr. Becker are among the leading and standard authorities of the day. As a work of reference for the general practitioner, the alienist and our friends of the bench and bar, it stands without a parallel, and we are confident that it will become what it deserves to be—the standard authority of the day.

A TEXT-BOOK OF MATERIA MEDICA, THERAPEUTICS AND PHARMACOLOGY. By GEORGE FRANK BUTLER, PH.G., M.D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons of Chicago; Professor of Materia Medica and Therapeutics, Northwestern University, Woman's Medical School; Attending Physician to Cook County Hospital; Member American Medical Association; Illinois State Medical Society; Chicago Medical Society, etc., etc. 8 vo. cloth, pp. 858; price, $4.00. W. B. SAUNDERS, 925 Walnut Street, Philadelphia, Publisher. 1896.

This is a clear, concise and practical text-book, adopted for permanent reference as well as for the necessities of the student. The arrangement (embodying the synthetic classification of drugs based upon therapeutic affinities) is believed to be at once the most philosophical and rational, as well as that best calculated to engage the interest of those to whom the academic study of the subject is wont to offer no little perplexity.

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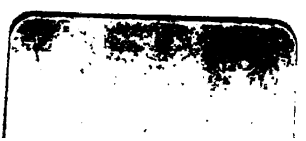
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